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ABSTRACT

The report on recurrent education in Switzerland is one of a series describing continuation education in OECD countries. Recurrent education is defined as a strategy to distribute education over the total lifespan of an individual in a recurring way and in alternation with work and other activities. Part I discusses the idea of recurrent education, provides a definition of the concept, and identifies aims and characteristics. Part II presents case studies of recurrent education at the University of Geneva, throughout Switzerland sponsored by the Federation Suisse, and in the postal department. Discussed are tasks and organization of training programs, access to training opportunities, and limitations of recurrent education in each case. Part III presents, as the bulk of the report, a discussion of the requisite conditions for the introduction of recurrent education in Switzerland. The structure and development of all levels of the Swiss system are compared with the theoretical model of recurrent education described in Part I. Topics discussed include: development prospects for the Swiss educational system, political influence, vocational training, and recurrent education as a subject for research. The conclusion is that recurrent education is a potential guide to development of Swiss educational policies in accordance with the stated objective of individual development. (Author/DB)

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RECURRENT EDUCATION

POLICY AND DEVELOPMENT IN OECD MEMBER COUNTRIES

SWITZERLAND

SO 009 994

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RAPPORTS PAR PAYS

SUISSE

3

Centre for Educational Research and Innovation (CERI)

RECURRENT EDUCATION

POLICY AND DEVELOPMENT IN OECD MEMBER COUNTRIES

SWITZERLAND

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1976

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PREFACE

Recurrent education on which CERI has been carrying out preparatory work over the last few years, has rapidly become one of the most interesting and promising alternatives for the future development of the educational system and its interaction with the world of work.

Through two recent publications called: *Recurrent Education: A Strategy for Lifelong Learning* (CERI/OECD, 1973), and *Recurrent Education: Trends and Issues* (CERI/OECD, 1975), CERI has made explicit the assumptions on which a policy for recurrent education is based and tried to identify its relation to social and labour market policies, as well as presenting an assessment of recent developments in the field.

The essence of the concept is that it distributes education over the lifespan of the individual in a recurring way. This means a development away from the present practice of a long interrupted pre-work period of full-time schooling. It also implies the alternation of education with the individual's other activities in life - principally, of course, his work: but his leisure time and even his retirement might also be included. Hence the essential potential outcome of recurrent education would be the individual's liberation from the strict sequence of education-work-leisure-retirement and his freedom to mix and alternate these phases of life within the limit of what is socially possible and to the satisfaction of his own desires and needs.

At this point, CERI has considered it as essential to endeavour to present the actual developments in Member countries concerning recurrent education. As part of this project on recurrent education CERI is issuing a number of country reports on the subject.
These reports are intended both to describe existing educational provision which qualifies for classification under the heading of recurrent education, and to attempt an estimation of future developments in this field.

The present report on Switzerland will be followed by others from OECD Member countries. Reports are already available for Australia, France, the Federal Republic of Germany, the State of New York, New Zealand, Norway, Sweden, the United Kingdom and Yugoslavia.

J. R. Gass
Director,
Centre for Educational
Research and Innovation

PRELIMINARY REMARKS

The present report was written in connection with the investigations by the Centre for Educational Research and Innovation (CERI) into recurrent education and is Switzerland's contribution to the series of CERI documents reviewing recurrent education in OECD countries.

Political thinking and action in the last few years have focused on our educational structures and there has been a realisation of the importance of research in investigating the various fields of education and working out projects for educational change. Greater clarification and a sounder grasp of theory are essential if misunderstandings are to be avoided in discussing educational concepts. The present report is designed to give wider currency to the new concept of recurrent education. Its purpose is to outline an educational policy suitable to our country's requirements on the basis of the schemes of recurrent education which have already been initiated both inside and outside the educational system.

In response to requests from various quarters and particularly the Fédération Suisse pour l'éducation des adultes (FSEA), a body which covers most of the institutions concerned with adult education in Switzerland, our Office approached CERI for assistance in compiling a report which would deal with recurrent education in Switzerland and serve the appropriate federal and canton authorities as a useful working instrument.

The Confédération and the Cantons are undoubtedly interested in all issues relating to recurrent education. Mention need only be made of the problems they are now facing in connection with their powers of action in the fields of vocational training and university education.

To study these questions and plan a report on recurrent education, we held a session in Bern on 18th March 1974, to which we invited representatives from the various quarters concerned. A drafting group was then set up consisting of a representative from each of the following bodies and institutions: a research team working from the preparatory stage at the University of Aargau, the

EPSE in Geneva (1) the FSEA, the Office de la Science et de la Recherche and the Conférence des Directeurs de l'Instruction Publique. The group was instructed to appoint the authors of the report and keep their work under review.

It was agreed that the Swiss report should enable our requirements to be identified and certain approaches to be examined for policies for education and educational research. It should not merely be a background study but should offer a basis for co-operative progress towards a comprehensive educational system and serve to promote discussions on the relevant problems in Switzerland.

We must therefore repeat that the present document is essentially intended to provide the authorities and the policy-makers with information on the problems of recurrent education and promote greater awareness among those concerned with certain aspects of the development of educational policy. This report is not a final study nor is it a survey of the situation in Switzerland nor even a working plan. It should be regarded as a preliminary step, an incentive or even an invitation to study possible future developments in the educational system.

The report is also part of the preparatory work for the 9th session of the Standing Conference of European Ministers of Education to be held in Sweden in June 1975. The Ministers of Education have chosen recurrent education as the principal topic of their forthcoming meeting. The OECD has been invited by the Chairman of the Committee of Senior Officials of the Standing Conference to participate in drawing up a report on policy trends and problems relating to recurrent education. The report is intended as a basis for the ministers' discussions and the signatory countries of the European Cultural Convention have undertaken to study the problem with a view to participation in the Conference.

Owing to lack of time and facilities the report does not cover all that is being done in Switzerland at the present time to increase available training opportunities. After a wide survey which gives an idea of the multiplicity and variety of the experiments which have been initiated everywhere, the authors of the report estimated that a selection would have to be made, and decided to analyse three cases involving a considerable degree of institutionalisation. The cases were chosen not so much for their value as examples but because they focused more closely on the problems concerned and more effectively clarified the problems which arise when schemes of recurrent education are put into effect. These examples were compared

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1) EPSE: Ecole de Psychologie et des Sciences de l'Education à l'Université de Genève (School of Psychology and Educational Sciences, University of Geneva).

and related to the overall system of Swiss education. The presentation of that system as a whole will reveal the sectors in which a start has already been made with recurrent education.

We want to thank all the other organisations (1) which have responded to our appeal and sent us valuable information and documentation. All this material was carefully examined and used in deciding the basic lines on which the report should be constructed. We would also emphasize here that the report is the outcome of close collaboration between researchers from the country's different linguistic regions and an example of the valuable results which may be obtained from an encounter between different cultural and linguistic approaches. We are convinced that there is much benefit to be derived from our differences and that our linguistic barriers are no obstacle when there is a real urge towards co-operation.

We also wish to thank the authors of the report for the work they have done. Their dedicated approach rapidly enabled them to overcome considerable difficulties and produce a study which will undoubtedly be highly appreciated for its clarity and precision on essential points.

Our gratitude is also due to the members of the drafting committee who have greatly contributed to the success of this undertaking with their criticisms and suggestions. Nor do we forget all those who in one way or another have co-operated in finalising the report and we refer particularly to the Centre Suisse de Documentation en Matière d'Enseignement et d'Education et le Centre Suisse de Coordination de la Recherche en Matière d'Education.

In the particular field with which it is concerned, this report, produced with the assistance of CERI, will no doubt help its readers, as we at least hope, to obtain a better understanding of the complexity of the problems our educational policy has to meet at the present time.

Prof. U. Hochstrasser

Director,
Office de la Science et
de la Recherche

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1) The following organisations are concerned:

Akademie für Erwachsenenbildung (Academy for adult education).
Akademikergemeinschaft (Association of Academic Staff).
Arbeitsgemeinschaft für berufliche Weiterbildung (Working Group on further vocational training).
Institut für Management und Kaderausbildung (Institute for Management and Executive Training).
Kantonalzürcherische Arbeitsgemeinschaft für Elternbildung (Zurich Working Group on the Education of Parents).
Migros-Klubschulen (Migros School Clubs).
Pestalozzianum Zürich, Lehrerfortbildung (Recurrent Education for Teachers).
Schweizerische Bundesbahnen, Sektion Ausbildungsfragen und Studien (Federal Railways, Training and Research Branch).

INTRODUCTION

There is now hardly any doubt as to the constantly increasing importance of education in dealing with current problems. What is in dispute, however, is the capacity of the present educational system to achieve these objectives.

As a result of the wide expansion in compulsory education in Switzerland and abroad in the last few decades there is an ever-growing demand for adult education, both general and vocational, supported by the following arguments:

- basic education should not be too long. Even at the present time, young people who have reached adulthood tend to remain too long in economic dependence on their parents. This prevents them from claiming the rights and fulfilling the duties of an adult;
- the "complete" basic education is now no longer sufficient to exercise an occupation for 40 or 45 years. Science and technology are expanding so fast that knowledge acquired is obsolete in a few years. Modernisation and rationalisation make it necessary to adapt to new working methods and new functions. Whoever is able to improve his training has a key to new career opportunities.
  The decline of certain branches of the economy and the expansion of new branches has forced a growing number of workers to change their jobs or their occupations and to acquire a new proficiency;
- economic, political, social and cultural problems of every kind are changing so rapidly that the individual has more and more difficulty in safeguarding his rights and fulfilling his duties if he does not constantly keep his training up to date.

These problems reveal that both the individual and the community are beginning to see education in a new light. A basic training which purports to give people a definitive "preparation for a working career" no longer appears to meet present requirements. If lifelong education is now recognised as a vital need the whole of the educational system will have to be remodelled at all age levels. The present report is a contribution to the discussion on the nature o this new concept and it gives particular prominence to lifelong adult training.

Despite the fact that training opportunities have appreciably increased in Switzerland in the last few years practically all adults who are anxious to pursue their training have to contend, to a greater or lesser extent, with financial or legal obstacles or are hampered by lack of time.

The following two brief examples will illustrate these opportunities and difficulties. The cases of Jacques R. and Isabelle G. are a true statement of facts; only the names of the persons and places have been changed.

Jacques R.

Jacques R. is an accountant in the Basle branch of a big European travel agency. Aged 41, married and father of three children, he has worked in the agency for eight years. He joined the firm after finishing his education (two years at the School of Commerce which he left without a diploma). Before he joined a travel agency, he was a clerk and subsequently an accountant in a large firm.

As the manager of the Bâle branch is nearing retirement, Jacques R. raised the question of his succession with Head Office. He already acts as assistant manager. He replaces his manager when the latter is away, he performs administrative functions and his contacts with customers are not limited to accountancy. He is very conversant with the firm's work, his relations with the other employees are good and he is appreciated by his manager as a hardworking and intelligent executive.

The reply he received from Head Office was disappointing. Owing to the growing complexity of the work, the large number of internal candidates for promotion, many of whom are graduates, Head Office feels that a branch manager must at least hold a commercial certificate of "maturité" level (second-cycle secondary leaving certificate) if not a university degree. Without these qualifications Mr. R. would not be at the top of the list of applicants. Jacques R. pointed to his initial training (two years at the School of Commerce), his experience as an accountant, his thorough knowledge of the work in general and the work of the Bâle branch in particular and the recommendations of his immediate superior. In vain.

He then made enquiries at the School of Commerce and later consulted a vocational guidance service. He found out that he had four possible courses of action:

1. Full-time attendance at a school of commerce. This would enable him to do the course in one year and pass the maturité examination at the end of the school year.
2. Studying for the examination in evening classes for six hours a week over a period of three years.

3. Engaging a tutor to bring him up to examination level.
4. Taking the adult correspondence course for the maturité examination in commerce.

Through the good offices of his manager, Mr. R. asked the Head Office how far the Agency could help him to complete his studies. He justified his application by pointing out that apart from his own case the Agency itself had everything to gain by helping its executives to improve their proficiency. More specifically, he asked the Agency for nine month's paid leave to enable him to return to the School of Commerce. If necessary he proposed that the Agency should pay him 60 per cent of his salary for the nine months in question and lend him the remaining 40 per cent, interest-free.

The Personnel manager replied in the first instance that he had never before received an application of this nature and would submit it to Head Office. But he explained to Mr. R. that the Company had no budget for recurrent training apart from an annual five-day seminar for branch managers and senior executives.

The following week Mr. R. received an official reply to the same effect. Nevertheless, on exceptional grounds he had been granted 10 days' additional leave per year for the next three years.

Somewhat disappointed, Jacques R. made enquiries elsewhere as to the possibility of a loan to cover one year's unpaid leave and a tutor's fees. He soon realised that in view of his family responsibilities he could not afford to leave his normal employment for nine months. Apart from that, a tutor's fee was extremely high.

He was therefore obliged to enrol for evening classes at a public institution. Fortunately, the tuition fees were low and the class contained other adults whose situation was similar to his own. He made a number of contacts with whom he remained in touch subsequently and for the first six months he enjoyed preparing the lessons and attending the classes. Several of the subjects interested him, particularly mathematics and commercial management. He read some stimulating books and was able to use examples from his work at the firm in the course of his practical exercises. Class work proceeded in a relaxed atmosphere. The teachers were clearly masters of their subjects and were available to the students outside classroom hours for advice or even private lessons. Nevertheless, towards the end of the first year Mr. R. gradually lost the incentive to continue. For the following reasons:

He spent almost all his leisure time in preparing his lessons (about five hours per week), attending classes (three hours per week) and travelling. He was obliged to sacrifice his other leisure activities. He had less time for his friends and particularly his children. Shutting himself up to work every evening and often at weekends he no longer had any chance of a quiet chat with his wife.

As he needed silence in the evenings and at the weekends, he had to make his children play in their rooms or outside. The family was likely to find it difficult to put up with this situation for three years.

Most of the students at the evening class were between 20 and 30. Jacques R. was one of the oldest. After some months he realised that he had less energy than before to carry out his duties at the travel agency, prepare his courses, travel to and from the night-school and give attention to his family. The situation was having its effects on his health (greater susceptibility to influenza and colds), he found it difficult to get up in the morning, felt tired in the evenings and by the end of the afternoon, and exhausted at weekends.

Although he was interested in several of the subjects he studied he considered certain others neither interesting nor useful. His course of study was in fact modelled on the lines of the syllabus prescribed for pupils in the 16 to 18 age group at the School of Commerce. This consisted of general subjects which Mr. R. had studied at school or as an adult, e.g. French or mathematics, in which the textbooks and exercises bore little relation to adult requirements. There were also problems of law or management, much of which Mr. R. had already handled in everyday practice but which had to be worked through because they were on the official syllabus. Mr. R. already has all the technical knowledge and proficiency required for the maturité examination but not in the rather bookish and abstract form required by the syllabus and the examination.

Mr. R. was not sure whether he would be appointed manager of the agency even if he obtained the diploma in commerce. He knew that there would be other applicants including young executives with degrees in economics. He also realised that despite the time he was devoting to his course it was not proving very beneficial to him either culturally or in terms of greater proficiency in his work at the Agency.

Mr. R's attendance at his evening classes then began to fall off and finally ceased in the middle of the second year. For some time he tried a correspondence course. This method saved him a good deal of time and he found the syllabus better suited to adult students and better planned than the evening class syllabus. But Mr. R. missed the discipline of institutional study. He did not do his exercises regularly and sometimes dropped them for weeks at a time. This was partly because he had nobody who could advise him on the problems he encountered and because the material was too abstract and too reminiscent of his schooldays.

He also tried to engage a tutor for a few hours a week and prepare for the examination on his own. After a few weeks the tutor concluded that his progress was too slow and advised him either to step up his rate of work or drop the whole project.

Jacques R. acted on this advice and his home-life became normal again. On the retirement of the branch manager, he hopefully submitted his application for the post but without too many illusions.

Isabelle G.

On leaving school, Isabelle G. enrolled at a school of commerce to qualify as an executive secretary. While on a temporary job with a doctor she became interested in medicine in general and pediatrics in particular.

Her first stable employment was with a pediatrician in Geneva. She received the patients and kept the files and accounts. She also obtained the doctor's permission to spend a few hours every week as a probationer in the medical laboratory attached to his surgery where the results of blood and urine tests were analysed. By reading books on physiology and biochemistry at home she soon became a proficient laboratory assistant.

Two years later she obtained a new job as assistant in a medical laboratory and even considered the possibility of completing her secondary schooling and entering the university as a medical student. But after a year she realised that her new job gave her no opportunity of contact with children. In the second year she obtained unpaid leave for a practical training period in the psychotic children's ward of a mental hospital. From the human angle she found the work absorbing and satisfying, but was depressed by the emotional state of the children and the slowness of their progress.

In the following five years Isabelle G. held a number of jobs as a laboratory assistant or doctor's secretary interspersed with training in several para-medical educational and social institutions, e.g. a re-education centre, a crèche and a hobbies centre. Her final experience, in a kindergarten, interested her particularly.

She hesitated between two choices. On the one hand, she would have liked to study psychology in order to become a children's psychologist. She was already reading extensively in the subject and attending public symposiums. On the other hand, she was interested in training as a kindergarten teacher.

As children's psychologists in Geneva are required to have a university degree, Isabelle G. soon realised the difficulty of the first choice. She would have to attend evening classes for two or three years in order to pass her "maturité" examination (secondary school leaving certificate). She would then have to study for four years at the university. On the other hand, candidates for training as kindergarten teachers were not required to hold the secondary school leaving certificate and needed no more than two year's full-time training. She asked the institute responsible for this training whether the courses she had attended and the employment she had held might be taken into account to reduce the number of theoretical or practical courses she would have to attend at the school for kindergarten teachers, but was told that this was impossible.

She was still tempted by a psychologist's career which was closer to her medical interests and at the same time was concerned with children. On the other hand, she felt that despite all her private reading she still did not possess the educational background she would have if she passed the secondary school leaving certificate. She enrolled for evening classes but dropped them a few months later when she realised that her own general education was much richer from her private reading and travelling than the content of the school curriculum. She also felt that this curriculum was no preparation for the actual work of a psychologist and that she would benefit more if she took the university course in psychology as an unmatriculated student. But she was not prepared to invest seven years in an additional training.

She then decided to become a kindergarten teacher and attend the university courses at the same time. As she was unmarried and had simple tastes, she had managed over the years to accumulate a few savings, precisely in order to be able to stop working for several months. She continued to work for a year and a half as a doctor's secretary in a re-education department and this helped her to save enough to live on and pay for her training. Thus, at the age of 28, Isabelle G. began a new career.

These two cases illustrate the problems which can confront an adult who is anxious to continue his training. The problems are both personal (fatigue) and social (professional experience is unrecognised), and each reacts on the other. The present report is largely concerned with social problems and situations (e.g. educational policies, economic problems).

Part one

THE IDEA OF RECURRENT EDUCATION

DEFINITION OF RECURRENT EDUCATION

Both in Switzerland and abroad, attempts are being made to find a solution to the problem we have outlined.

The idea of "lifelong education" was put forward by the Council of Europe and UNESCO. It is based upon the assumption that man is capable of educating himself at any age and that he should therefore have an opportunity of testing and extending his knowledge and proficiency through a system of lifelong training either at school or out of school.

The system of "recurrent education" recently proposed by CERI (OECD) is an attempt to create a framework for the achievement of "lifelong education". It is designed to offer the individual greater opportunities of personal development, even-out social inequalities due to differences in education and facilitate interaction between the world of work, the educational system, and the other sectors of social life. Recurrent education may therefore be defined as follows:

"... a comprehensive educational strategy for all post-compulsory or post-basic education, the essential characteristic of which is the distribution of education over the total lifespan of the individual in a recurring way, i.e. in alternation with other activities, principally with work but also with leisure and retirement". (Clarifying Report, p. 24).*

Given this definition, it may be wondered whether recurrent education should not also include the whole period of compulsory schooling. For example, an ability and inclination for life-long education should be fostered and theory related to practice right from this initial stage.

The definition of lifelong education leaves one other question unanswered. It makes a distinction between "education", "work", "leisure" and "retirement". The periods during which a person continues his training are separate from his daily work. Training is therefore understood as an activity which differs from other habitual activities. Furthermore, the training periods which extend throughout a working life under the recurrent education system are organised, i.e. they take place in the context of educational institutions. The idea might therefore be envisaged of extending compulsory training to all age groups in a population, beyond the period of compulsory schooling. However, this is not the way in which the OECD visualises recurrent education. On the contrary, the latter is to be achieved through a far-flung network of educational opportunities permanently available to individuals or groups according to their requirements.

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* Recurrent education: A Strategy for Lifelong Learning. CERI/OECD, 1973.

Current research shows that childhood is the period when human beings learn most rapidly and most effectively. When considered more closely, however, the child's learning process cannot be separated into two categories, i.e. the acquisition of knowledge and other activities.

The "learning periods" are mixed with the child's other physical, spiritual and social activities. Similarly, an adult's vocational life, his family life and his social relations cover a multitude of educational activities. It would be desirable for every adult to achieve lifelong education, e.g. by reading, discussion or attendance at training or re-training courses.

In a system where educational opportunities are organised, it will be possible to acquire ability and knowledge continuously and with greater speed and efficiency. Through training periods of varying length which take him out of his usual setting, an individual can increase his abilities and his receptivity in such a way that his proficiency is steadily enhanced even in the course of his daily activity.

AIMS OF RECURRENT EDUCATION

A number of problems which have to be solved through recurrent education were briefly mentioned at the outset. The essential aims of recurrent education may be divided into three categories(1).

Personal aims

Every human being should be able to develop his personality. He should be in a position to acquire the knowledge and skills which will enable him to understand and influence his environment. He should learn to emancipate himself from social pressures and become aware of his own prejudices. He should be capable of shaping his own destiny.

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(1) Cf. Recurrent education: A Strategy for Lifelong Learning, CERI/OECD, 1973.

Vocational aims

Recurrent education should increase the permeability of the labour market. The possibility of acquiring new knowledge and skills in a comparatively short time makes it easy not only to change one's occupation but also to obtain promotion in a given occupational sector. In this way, any changes in the labour market (e.g. as a result of the spread of automation or plant reconversion) will be easier to cope with.

Social aims

Recurrent education should promote a more effective control of economic and political trends and social, leisure and family policy. The sharp contrasts between the roles the individual plays at his work, in his leisure pursuits and among his friends must be reduced and this is true also of the differences in proficiency, thinking and values between young people and their elders. A better balance must also be achieved as regards the training opportunities and the social status available to the different sections of the community, to men and women, to one generation and another and to one nationality and another.

Admittedly, there may be contradictions between the objectives CERI (OECD) has set itself. For example a system of recurrent education exclusively based on the immediate needs of the labour market would seriously jeopardise the personal aims of recurrent education.

CHARACTERISTICS OF RECURRENT EDUCATION

Are there already any organisations, institutions and enterprises in Switzerland which are trying to achieve a form of recurrent education even if they do not use the term? Is it possible to introduce recurrent education without a change in the existing system of school and post-school education and in other social sectors?

In order to deal with these questions with the help of a number of specific cases, certain characteristics have been identified on the basis of the Clarifying Report. They seem important in the light of the central principle of recurrent education, i.e. the "possibility of alternation between education and other activities". They do not form an exhaustive list but represent an attempt to work out a procedure to shape and evaluate the first steps towards recurrent education in Switzerland.

Each of the following five characteristics is briefly justified in the introduction. They are followed by a number of exemplifying questions. These questions must be considered if the specific implications of the characteristics concerned (e.g. practical experience as a condition of admission) are to be evaluated in an example.

Practical experience as a condition for admission

In an educational system involving alternation between education and other activities, more significance than at present would be attached to practical activities and experience.

Does practical experience replace some or all of the examinations which give access to educational institutions? Must experience have been gained in a specific sector to justify a specific course of training? How is practical experience to be evaluated? Is practical experience an essential prerequisite for access to training processes or periods?

The credits system (1)

In recurrent education all sections of the community are to be offered a range of educational opportunities. For this purpose the term "credits" is used in the present report. The term applies to the component periods in a total course (e.g. a course for car mechanics, a course in teaching or group dynamics, a typing course or a seminar in psychology). Persons wishing to change their occupation should be able to accumulate these credits over a varying period and thus work through a complete course culminating in the award of a certificate.

Are these credits purely vocational or is general education (e.g. current political and social topics) also taken into account? How many hours, days or weeks does a credit cover? Is it possible under the projected scheme to accumulate different credits simultaneously or successively over varying periods of time? May these credits be accumulated in any order and over any period of time for the award of a final certificate? Is the validity of a certificate confined to the organisation or enterprise which awards it?

Teaching methods and media adapted to adults

A system of teaching designed for adults of all age groups must use methods suitable for adults.

In the cases considered are the course organisers and managers aware that adult training calls for specific methods? What methods should be adopted for teaching adults? Have special methods and

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1) Other terms are: Baukastensystem (German Federal Republic) and modular training (British and Canadian vocational training). "Credits" is used in the USA.

facilities been devised for adults? Adults have the right to decide which credits are important to them and how objectives and contents should be presented. The possibility of safeguarding this right is part of the motivation for lifelong training. To what extent can participants exercise a direct influence on training processes and courses? Where can they discuss problems, participate in running courses and take joint decisions? Are their wishes, aspirations and criticisms taken into account in the course of the training period or processes? Have they an influence in shaping future educational provision?

Paid educational leave

The possibilities open to an employee of improving his training largely depend on his own efforts.

Has every member of a firm or organisation an opportunity of obtaining paid leave? Is training leave subject to certain conditions? Is paid or unpaid leave granted only when it is strictly vocational? Does a grant of leave oblige an employee to stay longer with his firm? Has paid leave any legal basis?

Access to training opportunities

The existence of several official languages in Switzerland and the remoteness of certain regions entail special problems which have to be met by schemes of recurrent education.

Are schemes accessible to persons living in the remoter areas? Are timetables so devised as to enable candidates who have not obtained leave to attend courses after working hours or at weekends? Is the cost of training so calculated that it does not fall too heavily on the budgets of the trainees? Is provision made for linguistic differences?

Adult general and vocational training in Switzerland may have some of the characteristics we have referred to without being of a recurrent nature. The way in which the characteristics interact is of decisive importance in ascertaining whether the training offered by institutions, organisations or enterprises approximates to the idea of recurrent education.

Three cases will now be considered in the light of the characteristics listed above. They are drawn from three different areas of organised lifelong education:

- the public services (Post Office);
- training of responsible staff for general adult education (Fédération suisse pour l'éducation des adultes, FSEA);
- university level (continuing training and retraining of teachers at the Ecole de psychologie et des sciences de

l'education (School of Psychology and Educational Sciences), University of Geneva).

These examples focus on initial schemes of recurrent education but also provide some evidence as to where the problems and limitations arise in the attempts made by various firms and organisations to implement this concept.

Part two

EXAMPLES OF INITIAL SCHEMES OF RECURRENT EDUCATION

PEDAGOGICS DEPARTMENT, SCHOOL OF PSYCHOLOGY AND EDUCATIONAL SCIENCES (EPSE), UNIVERSITY OF GENEVA

Tasks and Organisation

Tasks

The EPSE is an institute of the University of Geneva and scheduled shortly to become a faculty. It consists of two sections, psychology and pedagogics. EPSE students enrol in one section only but attend courses and seminars in both.

The psychology section consists of about 500 students and 35 teachers. It awards a degree (five years' study) and a doctorate and prepares students for the following careers: graduate research worker (particularly on mental processes in children), child psychologist, school psychologist, speech therapist and vocational counsellor.

The pedagogics section has about 450 students and 30 teachers. It awards a degree (three years' study), post-graduate diplomas (two years' study) and a doctorate. This section provides part of the basic training for primary school teachers and also continuing training for primary teachers, secondary teachers, senior educational staff (inspectors, teachers at training colleges, heads of secondary schools, senior officials in the canton educational administration), research staff at the research centres in Geneva and French-speaking Switzerland and adult education instructors. It prepares students for careers as research workers, specialised educators (particularly in schools for mentally handicapped children), educational planners, adult education instructors and teachers at teacher training colleges.

The psychology section caters only for full-time students. The average age of students is 19-20. The pedagogics section which utilises a credits system mainly has part-time students including a large number of teachers and other responsible staff in the primary education service. The average age is 30-35.

Lifelong education

The career of a primary school teacher is the best illustration of the contribution of EPSE to recurrent education.

After completing their secondary schooling (and obtaining their "maturité") intending primary school teachers enter the teacher training college at the age of 18-19 for a three-year course (pedagogics for primary school teaching). They spend the whole of their second year at EPSE. It is a year of theory leading up to the propaeduetic certificate. They generally attend the same courses and seminars as students in their first year for a degree at EPSE.

On the completion of their three years of training, candidates are awarded the primary teaching diploma and take over responsibility for a class. After three year's experience they may return to EPSE to complete their degree. They are credited with a half-degree, i.e. the equivalent of two years' study. They enter the third year directly and merely have to accumulate seven credits (seven subjects, seminars or independent projects) and write a monograph for their degree. They may spread their studies over several years. At the present time there are about 120 primary school teachers in the 25 to 30 age group who are engaged in this course of study.

Several years later, when taking over other functions (inspector, official in the primary school administration, instructor in methodology at the training college) the teacher may return to EPSE to prepare for his new tasks. For example, for a special diploma in educational guidance, he is required to obtain seven credits at post-degree level, take an examination covering all subjects and write a monograph. He may take whatever time he likes to obtain this diploma.

This typical career profile may be completed by the following details which foreshadow the principal characteristics of recurrent education:

Freedom to choose subjects of study. Recurrent education curricula do not contain any compulsory subjects. However, there are different cycles each of which fits in broadly with yearly periods of study. For example, a student will accumulate nine credits in the first cycle (1st year of study) and sixteen credits in the second cycle (2nd and 3rd year). The range of courses or seminars is restricted in the first year but practically unlimited in the second cycle. Students enrol for courses at their educational guidance session at the beginning of the university year. On considering the curriculum each student has selected, the counsellor, who is a member of the teaching staff, may make changes in his initial choice either because he has observed some theoretical or methodological weakness or because he considers that the proposed curriculum is not well balanced.

Timetable: Most courses, symposiums and seminars are held at the end of the teacher's working day (from 4 p.m. onwards) or on Thursdays (school holiday).

Equivalent qualifications: The EPSE is prepared to waive its academic requirements for applicants with non-academic qualifications, e.g. primary school teachers with three years' experience. Similar concessions are made for applicants with the following qualifications:

- courses or seminars attended at university level;
- research;
- practical teaching experience;
- participation in practical training periods, seminars, symposiums, etc.;
- experience in running practical training courses or seminars;
- authorship of specialised reports, publications, etc.

Examinations. Most second-cycle courses (2nd and 3rd years) conclude with an individual evaluation. There is a tendency to replace traditional examinations by research or experimental work in the particular field covered by the student who is pursuing his academic studies pari passu with his professional work. The aim is to integrate theory and practice.

Independent projects. Should the student wish to investigate a field of study which is not listed in the syllabus or is on the borderline between several subjects he may work out an independent project which will be equivalent to a credit, i.e. will replace a course or seminar. In each project the student is counselled by a member of the teaching staff or a specialist from outside EPSE who keeps the student's work under review, helps him to compile and check his bibliography and evaluates the project. Projects often take the form of some problem or experience (investigating disturbed children, teaching a second language, devising a series of simulation exercises, managing an experiment among adolescents, etc.).

Type of teaching. There is little formal lecturing. Most teaching is in the form of seminars (15 to 20 students) accompanied by practical work.

Admission to the university. After negotiations with the rectorate of the University of Geneva, EPSE obtained permission to enrol applicants who hold a primary teaching diploma but no "maturité". In making its request, EPSE emphasised the initial training such teachers had received, their years of experience, and their social value to the community. For the time being this concession applies only to teachers in the Geneva district practically all of whom already hold the "maturité". Negotiations are in progress to extend it to certificated teachers from other cantons.

Continuing training and basic training. It is not possible to enrol in the Pedagogics Section without previous or parallel teaching experience. A student who enters EPSE immediately on leaving his secondary school is required to attend a practical training course of at least ten hours per week for a year. He is then asked to reserve part of his time for practical work, i.e. in a creche, a primary or secondary school, a centre for handicapped children, etc. These practical periods count towards his qualifications. They help to couple theory and practice, confirm the vocation of these students in the 18-19 age group, create employment and even reduce the number of examination failures, to judge from initial experience.

First Steps towards Recurrent Education

Practical experience as a condition for admission

As explained in the previous section (see p. 22), EPSE recognises practical experience as an equivalent of academic qualifications. Not that this is exempt from problems. Several teachers have complained of gaps in the theoretical and methodological training of adult students. Some of these students themselves consider that they are granted too much exemption from theoretical requirements and have difficulty in keeping up with certain work. The EPSE view has hitherto been that if an adult student realises that he has not reached the level required to follow a particular seminar he must bring himself up to this theoretical or methodological level by his own exertions. It is no solution to make him attend all the elementary courses. Nevertheless, it is obvious that practical experience is not a substitute for the theoretical and methodological proficiency required. Arrangements should be made at future guidance sessions (see p. 22) to investigate the nature and extent of an applicant's practical experience in the light of the academic requirements of the EPSE course.

It should be added, with respect to the above points that a large number of teachers are denied access to EPSE despite the value and scope of their practical experience. This applies to teachers sho hold neither the "maturité" or the Geneva teachers' diploma.

The credits system

The credits system enables adults to select an individualised curriculum and spread their studies over several years according to the time at their disposal.

Each credit covers two to three hours of lectures or seminars per week over one semester and an equivalent period in the form of preparatory work. The system entails certain administrative difficulties inasmuch as each student has a different curriculum.

The student acquires his degree or diploma by accumulating credits.

Should he leave the university he is free to resume his studies later at the point where he left off.

Teaching methods and media adapted to adults

Teaching techniques have appreciably changed since the arrival of a student body largely consisting of practising adult teachers. Examinations tend to be replaced by research work, students may replace a course of lectures by an independent project. Two similar tendencies have developed in teaching; 1) an increasing use of the case study technique and 2) a widespread use of video recordings for the analysis of practical situations. Teaching organisation has therefore been positively influenced by the fact that the student body is composed of practising teachers.

It must be added that there is no type of equipment or teaching method which suits all adult students any more than all children or all adolescents. For example, a recent field of research has been the analysis of the relationships between adult personality characteristics and teaching methods. Certain adults feel a greater need for supervision in their work than others. Adults who tend to be anxious and lack self-confidence obtain better results with traditional methods (formal lectures, compulsory reading programmes, written examinations with precise questions). Those with an urge towards association derive greater profit from group discussions. Students who are personally and professionally ambitious prefer curricula which entail few lectures and no examinations or set tasks. Certain students react better with a teacher who is adept at creating a warm and friendly atmosphere whereas others are less appreciative.

Students who are doing recurrent training at EPSE choose their curriculum from an entirely optional list of subjects. In certain disciplines, objectives, contents, methods and evaluation procedures are negotiated at the initial sessions. In other disciplines the teachers propose a pattern of study which is debated and may be modified in the light of the discussions. Other teachers themselves decide how their course is to proceed at the outset. The principles of consultation and course evaluation by the students are accepted by all teachers at EPSE but there are no guiding lines to fix objectives and contents. The curriculum itself, i.e. the description and content of the courses is drawn up in consultation with the delegates of the teachers' associations and an internal board of studies which includes a representative of the student body. A series of interviews with the students conducted by an outside specialist provides a system of evaluation which enables errors to be corrected and student requirements to be more effectively satisfied.

In a course of university studies it is difficult not to maintain some and even many of the requirements for the award of the university degree. The field of negotiation between teacher and student will always be limited by the requirements of the university and the need to uphold certain standards and neither consideration will always meet the objectives and needs of the students. For example, persons undergoing a period of recurrent education try to restrict the scope of the courses to the specific and precise problems the adult student encounters in his professional experience. In many cases the form ultimately taken by a particular seminar represents a compromise between the theoretical, scientific approach and the more clinical or existential analyses of actual experience.

Paid educational leave

At the present time only a tiny proportion of students is granted paid leave or hours off to attend courses. Current legislation offers secondary school teachers leave with pay in a limited number of cases (about fifteen teachers per year). The practice of giving teachers hours off is more frequent in secondary than in the primary schools and is still very uncommon under formal training schemes. In most cases teachers are given time off to sit on boards or perform certain duties for the educational authorities. The latter are co-operative when teachers ask for time off to attend a seminar or a workshop which lasts one or two days. But no coherent policy for the continuing training of teachers has yet been formulated by teachers' associations or the educational authorities.

However, it is essential to note that the introduction of recurrent education schemes at EPSE was facilitated and, it might almost be said, made possible by a special allocation of funds from the Department of Education. Additional appropriations were in fact made available to the University of Geneva by the primary and secondary education authorities in order to increase the number of available courses and intensify research on educational problems. Discussions on the choice of subjects, practical teaching arrangements, the types of trainees envisaged and the connections between recurrent training schemes for teachers and educational reform have paved the way towards a training policy for the whole teaching body in the canton of Geneva.

Access to training opportunities

To give the maximum number of teachers access to EPSE training schemes courses are organised after teaching hours or in the afternoons of school holidays.

TRAINING COURSES ORGANISED BY THE FEDERATION SUISSE POUR L'EDUCATION DES ADULTES (FSEA) FOR GROUP LEADERS AND OTHER ADULT EDUCATIONAL INSTRUCTORS

Tasks and Organisation

The FSEA is a federation of thirty adult education bodies (some of which are themselves federations). The courses are designed as basic training for a new profession. Certain FSEA bodies themselves organise courses of further training for the benefit of their members although these are all short courses.

Since 1970 the FSEA has arranged courses for persons who are employed full-time or part-time in adult training. Most of the participants come from member bodies. Certain of them have an occupation which is only partly concerned with adult education: one example is a traffic policeman who gives children and old people courses in road safety education. Some women trainees are housewives who are engaged voluntarily in adult education. The sexes are about equal in numbers. The trainees come to find the answer to problems they have already encountered in the course of their teaching activities and their motives are therefore specifically professional.

The full training scheme comprises four five-day courses. Each week is devoted to a different problem of adult education:

"Effective methods of teaching and learning in adult education"
"Effective equipment and media for adult education"
"General didactics and evaluation"
"Group dynamics in adult education"

Two one-week courses are organised every year, one in spring and one in autumn, in a locality in German-speaking Switzerland. The four permanent topics are dealt with successively. In this way participants can work through all the courses in two years but they can also proceed at their own pace.

In 1974 a first advanced course was organised for participants who had acquired a complete training in the first two series of courses (1970 to 1973). This will give them an opportunity of applying their new knowledge to practical problems.

After taking the four weeks of training in whatever order he finds convenient each participant receives a certificate stating that its holder has successfully attended a four-week course for group leaders. However, as the certificate has not yet been approved by all adult education organisations or by the public education authorities it merely confirms the personal effort made by its holder, but does not entitle him to any official recognition.

Adult education organisers and group leaders use methods and equipment specifically designed for adults. In this way, attention is drawn to educational objectives, teaching media and learning methods at every session to ensure that trainees are in no doubt as to the objectives of the courses they attend and the procedure adopted.

The FSEA courses make a special point of adapting teaching methods to their adult participants because the latter will have to deal with a similar public when they themselves begin to teach.

The objectives and contents of each day's work are laid down in the syllabuses. The trainees may propose certain changes in the daily programme. The course organisers have hitherto been successful (often after animated discussions) in getting trainees to agree that their prepared syllabuses are justified and no radical change has therefore had to be made in their courses.

After each week's work, participants are tested to assess the benefit they have derived from the teaching. At the same time, they are asked to give their views on the performance of each of the instructors. Wherever possible, criticisms and suggestions are taken into account in the planning of subsequent courses. The views expressed by the participants have hitherto been mainly favourable.

The number of participants fluctuates from week to week between 24 and 40. Between 25 and 40 per cent obtain paid leave. A slightly smaller number take unpaid leave. The others make use of their holiday time or have no particular occupation.

The courses are largely financed by the FSEA. The trainees or their employers pay the rent and cleaning costs of the premises and make a small contribution towards the cost of the courses.

At the end of 1973, certificates had been awarded to 25 participants.

First Steps towards Recurrent Education

Practical experience as a condition of admission

Almost all participants have practical experience in adult education which is the basic reason for their interest in the courses. However, candidates are not expressly required to have had experience in this field. It has so far been possible to accept almost all applicants although sometimes surplus candidates have been asked to wait until the particular course was repeated.

The credits system

The complete training scheme is composed of four component courses which can be attended in any order. In its objective and content each component is self-contained but the four courses, when combined, represent a thematic unit. As each component always deals with the same topic it is possible to follow the different courses at variable intervals until the entire scheme of training has been completed.

A trainee who has worked through the four courses is awarded a final certificate. The problem, however, is that no general recognition is attached to this certificate. If its holders draw attention to it whenever they apply for a new post it may finally begin to carry weight. There is little the FSEA can itself do to promote recognition.

Educational methods and media adapted to adults

This postulate has finally become a fact. The methods and media used in the courses are both a means and an end, with which participants are expected to familiarise themselves.

As the topics are decided beforehand, any participation by the trainees in planning the programme would seem to be limited. Nevertheless, they would have more chance of influencing the training schemes if they submitted their proposals about six months in advance and this they could do in the form of a request to the FSEA committee. Participants have an opportunity at the end of a course, and sometimes even at the end of each day's work, of expressing their views as to the planning and handling of the course.

Paid educational leave

Most trainees have all the difficulty in the world in obtaining ten days' training leave per year in order to be able to attend both the Spring and Autumn sessions. Only a few manage to obtain their final certificate after the minimum period of two years. Paid leave is granted in the first instance by employers who are anxious for their staff to acquire additional training of this type and these are therefore mainly institutions which are primarily concerned with training.

Persons who decide to take unpaid leave or use their holidays for training are presumably highly motivated. The number of people interested in the FSEA courses would probably be greater if there were more opportunities of training leave. At the present time many who are keen on training find it very difficult and often even impossible to obtain unpaid leave.

Out of a total of 220 participants in the eight weekly FSEA courses, 115 (52 per cent) had obtained paid training leave, 38 (17 per cent) had taken unpaid leave or had no occupation, while 29 (13 per cent) had used their holidays.

Access to training opportunities

Each course is spread over a week of full working days. This means that the locality chosen for the course is comparatively unimportant as trainees do not have to travel to and fro. The FSEA contribution to the cost of the courses keeps them very inexpensive.

BASIC TRAINING AND FURTHER TRAINING IN THE POST OFFICE

Tasks and Organisation

Areas of training and further training

The post office employs a staff of about 50,000 and is therefore the largest public service undertaking in our country. Its policy as a business concern and as an employer of labour offers a wide range of opportunities for basic training and further training, either on or off the premises.

Responsibility for training is in the hands of the personnel branches of the 28 area managements and the Head Office.

Arrangements for continuing training are largely centralised at the Head Office in Berne. There is an exception in the case of certain courses, e.g. languages or typing which the area managements are free to organise themselves.

The necessary basic training is designed for new recruits (apprenticeship period and introduction to the job).

Continuing training which we are mainly concerned with here is divided into four areas:

Supplementary technical training which is intended to improve the technical knowledge of the trainees and adapt it to new requirements. The post office organises in-service courses of additional vocational training, for example, at its Ostermundigen training centre, which is reserved for the telecommunication services. The continuing technical training programme also includes the permutation of post office personnel. This may take the form of an in-service rotation of personnel or an exchange of staff with other technical or administrative services, in Switzerland or abroad.

Further general training is designed to provide the individual employee with the additional proficiency he requires to perform his functions and help him to achieve promotion. For example, in-service training schemes cover courses in languages, typing, intercommunication techniques and methodology for instructors. Opportunities are also offered for attending outside courses, e.g. at universities or business schools.

Plans for giving post office officials more general training have been hampered by material obstacles and can only be put into effect very gradually. In view of the present lack of personnel the post office is concentrating its efforts on its fundamental training objective, i.e. giving the public a proficient basic service.

Vocational readaptation schemes exist to initiate entire groups of personnel into the new functions which arise out of changes in post office organisation.

Management training is designed to familiarise present and future managerial staff at junior, intermediate and senior level with executive responsibilities. These courses are held at the training centre at Macolin sur Bienne.

The number of courses has doubled in the last ten years. Eighty-three one-week (parallel) courses were organised in 1973 at Macolin with an average of 22 participants.

Possibilities of promotion and reconversion

The way in which the training of post office personnel is organised offers a wide range of promotion possibilities. These are primarily justified by considerations of staff policy. They represent a method of recruiting responsible staff and prevent the latter from draining away into other enterprises.

In administrative services abroad the personnel are in most cases appointed to their particular posts on the strength of an adequate schooling. In Switzerland, however, great importance is attached to experience, i.e. the number of years of service, in the work concerned. In all cases a minimum of two to five years is required. For reconversion there is an upper age limit, which may be exceeded (but rarely is).

Here are a few illustrations of this principle:

- After some years of service a uniformed post office official may enter the next higher category as "assistant d'entreprise". To do so he has to pass an examination and acquire the necessary proficiency in the course of a probationary period.
- Officials who are already "assistants d'entreprise" or who work behind a post office counter have opportunities of advancement. After a period of service, counter personnel may enter the next highest category as "personnel diplomé des postes". If they pass the entrance examination, serve a probationary period and pass a proficiency examination they are eligible for the same further training schemes as personnel who have entered the category directly. They may also train for senior management posts or even be accepted for the most advanced training.

  Technical officials also have opportunities for promotion on the basis of their practical experience.
- A telecommunication mechanic may enter the next higher category as technician without having to attend the technical college (technicum) which is the requirement for candidates wishing to enter the post office directly as technicians.

Almost all the 28 present area superintendents have made their career in the post office. But whereas the branch managers began their career as apprentices, the area superintendents began as technicians. Some of them owed their promotion to their administrative activity. Most senior officials promoted are men although 25 per cent of the permanent staff are women. At Head Office in 1974 only 13 of the 201 executives were women while at the various area headquarters there were only 3 out of 365 (postal division) and 17 out of 724 (telephone and telegraph service).

Any change of category depends on the result of the examination which gives access to a new channel of training.

In the technical sector these examinations are in a transitional phase. They are to be replaced by other criteria (e.g. productivity) relating to the candidate's previous activity.

A periodic qualification system is now being tried out in the post office and is to be introduced shortly for the whole of the personnel. In job changes in the federal administrative service, post office in-service training schemes take account of senior administrative experience acquired in the course of a probationary period.

Other characteristics of continuing training

Further training while in service: Certain postal administrations in other countries, e.g. the federal German post office, are able to grant certain of their personnel leave of absence for weeks and even months. Owing to the shortage of personnel, the Swiss postal services cannot afford similar arrangements and have to adopt in-service training methods. Most of the schemes offered by the post office therefore take the form of internal or external correspondence courses. This system is also used in basic training. Apprentices work part-time at the post office and their theoretical training does not necessitate an absence of more than a day or half a day at a time. This method by which practical work alternates with theoretical training is carried on in the continuing training schemes.

Financial arrangements for continuing training: At the present time the post office covers practically all the expenses. However, the financial arrangements for certain courses depend on whether the latter are in the interest of the post office or the personnel.

Participation in continuing training: The post office "Continuing Training Board" is concerned with all courses of this kind and consists of representatives of all staff organisations as well as the post office administration. The Board supervises the whole training system and has a hand in curriculum planning, the choice of instructors, etc. However, its function is purely advisory and it cannot take any decisions. Any innovation in continuing training, e.g. the introduction of a new course, is submitted to the Board for approval. But the innovation cannot be given effect unless it has the approval of Head Office.

Teaching equipment: The post office endeavours to keep pace with innovations in this field. Many years ago it introduced programmed teaching into certain branches of basic and further training. Use is also made of mini-cassettes and, more recently, of language laboratories. For reasons of economy the educational material issued to the area training services is to be prepared by a centre for educational media.

Teaching methods: The traditional lecturing method is still used by certain outside teachers but the post office is trying to get them to use more modern methods. Post office in-service instructors are sent on special courses to learn teaching methods from outside specialists.

Future plans for continuing training

The post office is at present trying to systematise continuing training but has encountered difficulties due to the wide range of occupational categories. Many innovations which have been envisaged from this standpoint are, however, not feasible owing to the present shortage of funds and personnel. For example, there were plans for facilitating the transition of older staff from full activity to retirement with the help of lecture cycles on this problem.

The new scheme maintains the principle of running training courses pari passu with normal service. The post office aims at a system under which work alternates with further training and has already largely achieved its objectives.

First Steps Towards Recurrent Education

Practical experience as a condition of admission

The above examples of category changes show that practical experience in a job is regarded as partially equivalent to basic training.

The examinations for admission to higher categories are the same for candidates offering practical experience as for those seeking direct entry. However, the examiners are more lenient in certain subjects in the case of personnel wishing to change categories.

But practical experience does not always replace basic training. Negotiations are at present proceeding with the staff association to determine how personnel who lack proficiency in the technical branches and telecommunications may acquire it subsequently through supplementary training. However, personnel in these technical categories who have passed through a technical college (technicum) see no reason why others should enter their ategory on much more favourable terms.

The credits system

If each course is regarded as a "credit" each credit has a particular value in a particular occupational category. Credits cannot be chosen or combined at will. This is because of the way in which the occupational categories have developed in the past.

An example of credits (i.e. further training courses) which dovetail with one another may be seen in the training laid down for senior executives at Head Office and at area management level. An official who is anxious for promotion must successfully work through "Correspondence Course II". This "language course for senior administrative personnel" lasts a year and is interspersed with seminars held in Berne. It offers a basis for the subsequent "course for senior post office officials" which provides a training in management techniques.

For access to the central course for telecommunications personnel, applicants must have already worked through the "Correspondence Course I for administrative officials" which is designed to develop the candidate's ability to express himself in his mother tongue and a second official language. The following example shows how training credits can be combined to ensure promotion.

Anyone who is anxious to attend "Executive Course I for certificated post office officials" must have worked through "Correspondence Course I for certificated post office officials" which is also designed to develop the candidate's ability to express himself in his mother tongue and a second language. The former course which consists of two two-week sessions at the Macolin training centre is intended to teach candidates how to run a post office and manage staff. For training at a higher level there is a two-week seminar consisting of "Executive Course II for senior post office and area office officials" which is an advanced course in management methods and techniques and is also designed to broaden the professional scope of candidates and provide a personality training. When officials seek promotion in the federal administration, any higher administrative in-service training they have had is taken into account.

Educational methods and media adapted to adults

The post office uses modern teaching equipment, e.g. programmed teaching and language laboratories. As far as teaching methods are concerned, it still partly depends on outside instructors to whom it recommends the use of new methods.

Trainees are entitled to voice their views either during their course or in the final discussions on its conclusion or in their answers to the questionnaires they are asked to hand in at the end of their training. Opinions expressed orally or in answer to questionnaires at the end of an in-service course are taken into account to enable future courses to be improved. This procedure may even lead to the dismissal of instructors whom the participants and organisers have not found satisfactory. For example, "Executive Course I" was entirely remodelled in its conception, scope and scale, although none of its basic objectives was sacrificed.

Paid educational leave

In a sense it may be considered that the post office further training courses involve paid training leave. With few exceptions all courses are held during working hours. A participant therefore draws his full salary but has no expenses in connection with the course.

However, there is no basic entitlement to a paid training course. Anybody anxious to attend a course must satisfy certain requirements and the course itself must meet a need felt by the individual in his service function.

Paid training leave is a term which may also be applied to part of the second channel of training. Post office personnel have an opportunity of attending evening classes and often even day courses at the technicum. The post office assists them by granting them a certain reduction in their hours of work and making a contribution to their expenses. For example, an employee who attends the technicum during the day is paid part of his salary over a period of three years for the time he is absent. In return he has to undertake to work for the post office for part of his holidays and after he has completed his course of study, failing which he is required to refund part of the payment he has received.

Some degree of paid leave is granted under certain conditions for outside training schemes organised by staff associations and unions but this never amounts to more than a few separate days of leave during the year.

Access to training opportunities

As the training courses are exclusively reserved for post office personnel, access to courses presents no problem, in the general sense.

BEGINNINGS, PROBLEMS AND LIMITATIONS OF RECURRENT TRAINING IN THE CASES STUDIED

We shall now try to show briefly how and to what extent the characteristics of recurrent training are reflected in the cases quoted and what problems they entail.

Practical experience as a condition of admission

At EPSE, practical experience (primary and secondary teaching) counts towards the required period of study. During this period care is taken to relate theory to practice. A certificate of practical proficiency is in fact required to terminate the course. The courses are not open to teachers from outside the canton but are limited to holders of the Geneva teachers' diploma.

In certain branches of the post office practical experience on the job may to some extent replace training and further training. Almost all FSEA trainees have practical experience in adult education, although experience is not a condition of admission.

At EPSE, as in the post office, certain problems arise when practical experience is taken into account. What theoretical knowledge are teachers required to bring up to date? How are they to update their theoretical knowledge on the basis of their practical experience? What assistance can they be offered? What can be done to overcome resistance from people who have already had a traditional training, but who were not granted such favourable conditions of admission at the period of their initial training?

The credits system

The examples provided by EPSE, the post office and FSEA illustrate possible ways of dividing recurrent training curricula into credit units. The post office and, indirectly, EPSE show that present career arrangements enable adults to obtain promotion by acquiring additional training. For example, a member of the post office clerical staff may avail himself of in-service training facilities to enter an administrative category.

At EPSE, the training courses (for the propaedeutic examination, the degree and the special diploma) are designed for teachers who perform different functions in the course of their professional career (teacher-probationery, teacher, inspector, professor of methodology, member of a school management board, etc.).

The FSEA confines itself to four units of training which are always offered in the same sequence (1-2-3-4) but may be taken in the sequence which best suits the participants (2-3-4-1, 3-4-1-2, etc.). The FSEA certificate is not yet officially recognised.

The post office training channels are career-oriented and organised in a strict sequence to which candidates have to conform. They primarily cater for the requirements of personnel who are anxious to obtain promotion. Apart from the language courses very little time is allotted to general education.

The post office training courses are valid only within the post office itself. The sole exception is the course for senior administrative posts which is also recognised for the federal, canton and local administrations.

Educational methods and media adapted to adults

The three examples quoted show that efforts have been made to adapt training to adult requirements. This policy seems to be particularly emphasised at EPSE which tries to devote more time to practical work than to lectures and to discuss the content of training with each student.

On the other hand, the further training and continuing training courses organised by the post office and the FSEA seem largely to be pre-established. Teaching methods and equipment are arranged beforehand and it is difficult to modify them during the course. At national level, however, the FSEA and other training and further training courses for adult education personnel are designed to allow for the specific characteristics (motivations, needs) of adult trainees.

The adoption of the teaching equipment and methods best suited to adults involves a variety of problems and offers a wide field for investigation and research.

Even if every allowance is made for the objectives and needs of adult students, technical and administrative difficulties may arise (e.g. at EPSE) as certain basic requirements (a certain demonstrable level of knowledge) must be met.

Paid educational leave

In the post office paid or partly paid training leave is subject to certain conditions (e.g. trainees are required to take courses relating to their job and continue their career in the post office) and depends on staff policy and the state of the budget.

Few EPSE students obtain paid training leave. The number of FSEA students enjoying such leave increased considerably in 1974. Even trainees who are teachers or work in adult education institutions receive training leave solely for further training in their career.

Access to training opportunities

EPSE adapts its courses to its students' professional commitments and organises them after school hours and on the afternoons of school holidays.

As the post office and FSEA courses are mostly held at training centres, access to courses presents no particular problems.

The three cases we have described (FSEA, post office and EPSE) cover fields which are so different that it would be idle to attempt any comparison and to rate them as "recurrent", "more recurrent" or "very recurrent". However, the way in which recurrent education is already beginning to assume shape may be gathered from the examples, although none of them makes the optimum use of its potentialities, a few of which may be listed below:

- Allowance for practical experience, and even direct professional experience, in examinations and training schemes.
- Possibility of spreading credits over a long period and combining them to obtain a certificate or enter a higher category.
- Possibility of taking a general training course, i.e. cultural, social and political, as part of a vocational training scheme.
- Possibility of working for credits (both general and professional) not directly concerned with entrance to a higher category.
- Participation and co-responsibility of trainees in planning courses, setting objectives, deciding contents and methods and evaluating credits and training schemes.

However, the three examples reflect the possibility of certain difficulties which can only be overcome through the efforts of the institutions involved. Mention may be made of:

- The granting of paid leave to all trainees (this particularly concerns the post office).
- The recognition of diplomas and certificates (outside the limits of the canton or the particular concern).
- Research, e.g. to develop methods and equipment suitable for adults.

The next chapter deals with the requisite conditions for the introduction of a system of recurrent training in Switzerland.

Part three

REQUISITE CONDITIONS FOR THE INTRODUCTION OF RECURRENT EDUCATION IN SWITZERLAND

PROBLEMS OF EDUCATIONAL STRUCTURE

The last part of this report covers the Swiss educational system as a whole. Its structure and development are compared with a theoretical model of recurrent education described in detail in Part one. For any consideration of the long-term development of national education systems the model offers a wide field of reference which makes allowances for the specific historical pattern of education in the Member states.

The introduction of recurrent education does not call for any radical upheaval. It can be achieved in gradual stages through the steady, co-ordinated development of existing educational institutions. The essential difference between this and traditional educational policy is that an extensive network of relationships has to be taken into consideration. A system of recurrent education can only be devised by closely co-ordinating educational policy and cultural policy, economic policy and social policy. At this point, the following questions arise:

- How far can the ideas of recurrent education be of use in discussing the future of education in Switzerland?
- Where do specific national features affect the objectives and structure of education in Switzerland?
- Where has recurrent education already been initiated in Switzerland?
- What can be said of the educational conceptions and objectives of the Swiss authorities when confronted with the idea of recurrent education?
- What progress towards recurrent education is being made on the political scene in Switzerland?
- What priority research should be done to ensure effective action in the field of educational policy?

Each chapter,will be planned with this approach in mind. The structure of Part three of the report is based on the present organisation of Swiss education which reflects the federal structure of the state.

THE EDUCATIONAL SYSTEM CONSIDERED AS A WHOLE

Recurrent education - an overall educational strategy

As pointed out in Part one the concept of recurrent education is designed to ensure a system of lifelong education. This has implications in all areas of education for at least two reasons:-

1. Lifelong education assumes that adults are capable of learning and are prepared to do so. These two tendencies may be decisively fostered by the schooling received in childhood and adolescence. The effectiveness of lifelong education is enhanced when certain fundamental conditions are fulfilled at the level of basic vocational training and compulsory schooling.
2. The tasks which face the countries of Europe in connection with lifelong education cannot be performed without a co-ordinated and rational investment of the facilities available for the educational system as a whole.

The federal organisation of education in Switzerland

What conditions does the present constitutional situation in Switzerland offer to achieve co-ordinated development in the educational system as a whole?

Swiss educational legislation is based on the principle of canton "sovereignty" (federal constitution of the Swiss Confederation, article 27(4). This principle is undisputed in pre-school education and it suffers hardly any limitations as far as compulsory schooling is concerned (the Confederation makes practically no use of its right of control over canton primary schools as laid down in article 27 of the Constitution).

On the other hand, the Confederation exercises its influence in the high schools (known in Switzerland as "collèges" or "gymnases") which prepare their pupils for the federal "maturité" examination. It lays down the requirements for the maturité examination and has set up a supervisory board (the Commission fédérale de maturité) to ensure compliance.

Vocational training and further training as well as vocational guidance are subject to a federal Act based on Article 34(3) of the federal Constitution.(1)

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1) "The Confederation shall have the right to legislate: ...(g) on vocational training in industry, the crafts, commerce, agriculture and domestic service" (Federal Constitution Article 34(3), first paragraph).

Under this Act the Confederation is also competent with regard to certain higher educational institutions (technical high schools and agricultural high schools). Other schools come within the scope of the cantons (in particular the training of primary and secondary school teachers). A third group falls under the responsibility of trade associations or non-profit making associations which are often state-aided (training of nurses or social workers).

The Confederation runs two Polytechnic Schools (in Zurich and Lausanne) and supports the eight canton universities (under Article 27 of the federal Constitution (1) but the cantons continue to enjoy complete autonomy.

Under Article 27 (4), the Confederation subsidises educational grants and scholarships awarded by the cantons.

The general and cultural education of adults is not based on federal law but is exclusively a matter for the cantons and the communes. In its message to Parliament on 19th January 1972 the Federal Council summarised the legal situation as it applies to education in the following words:

> "In consequence, the Confederation refrains practically entirely at the present time from exercising any influence on primary education. At the same time, university education, with the exception of the Polytechnic Schools, is also to a large extent outside its sphere of influence. On the other hand, it exercises a considerable influence over secondary education and has complete control of vocational education (...) The present distribution of powers is an obstacle to the development of our educational system into a coherent and homogeneous structure both horizontally and vertically ..."(2)

The "Conférence des directeurs cantonaux de l'instruction publique" (CDIP) endeavours to harmonise educational systems by agreements between cantons. It concluded the inter-canton concordat of 27th October 1970 for educational co-ordination, which has so far been signed by 20 cantons. Co-ordination applies, in the first instance, to the period of compulsory schooling, but it also concerns the "gymnases". (For complete text see Egger and Blanc, 1974). It

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1) "The Confederation shall have the right to establish a federal university and other institutions of higher education in addition to the existing Ecole Polytechnique or to subsidise institutions of this nature". (Article 27, 1st paragraph of the Federal Constitution).

2) Message by the Federal Council to the Federal Assembly of 19th January 1972, page 43 et seq. (see paragraph 2.3, p.5) regarding the new constitutional articles on education and research.

is essential for the education system as a whole that the cantons which signed the concordat should co-operate among themselves and with the Confederation in educational research, planning and statistics (Article 4). The following bodies are concerned with co-ordination:

- the CDIP educational commission (Commission Pédagogique) with several sub-committees, the secondary school committee and other committees and groups of experts;
- the "Centre suisse de documentation en matière d'enseignement et d'éducation" (Swiss centre for teaching and education) in Geneva which is a joint institution set up by the Confederation and the cantons;
- the "Centre suisse de coordination de la recherche en matière d'éducation" (Swiss centre for the co-ordination of educational research) at Aarau which is also a joint Confederation/canton institution.

At university level co-ordination is ensured by two bodies, i.e. the Conseil suisse de la science (Swiss Science Council) elected by the Federal Council and the Conférence universitaire suisse (Swiss University Conference) composed of representatives of the university cantons and the Confederation.(1)

A further step towards an overall approach to education was the federal Act of 27th June 1973 on statistical surveys of education which introduced a regular census for the whole of Switzerland. The Federal Council is in charge of this census and, at the request of an ad hoc commission, it decides the main features and timing of the survey and how its results are to be used.(2)

Development prospects for the Swiss educational system

The whole Swiss educational system is evolving. Are there any clues as to the direction of the present trend? Is it moving towards recurrent education? In its response to this question the report

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1) Other bodies with representatives at the Conférence Universitaire Suisse are the non-university cantons (a total of two representatives) and the union of Swiss Student Associations (also two representatives). The membership and functions of the Conseil de la Science and the Conférence universitaire are laid down in the federal Act of 28th June 1968, on aid to universities, Articles 18 and 19.

2) In the field of post-school education the Fédération suisse pour l'éducation des adultes (FSEA) endeavours to encourage private non-profit-making educational organisations and co-ordinate their schemes. The Federation is not only jointly supported by the Confederation and the cantons but most of its 30 member associations are in receipt of public subsidies.

refers to documents published by the federal authorities for quotations from the most recent statements and objectives of the groups which are making the most decisive contribution to educational policy in our country. These groups are primarily the political parties. It is they who have the task of preparing the decision-making process at canton and federal level.

In the last few years the authorities and the parties have been concerned with a matter of vital importance to recurrent education.

To what extent should the canton educational systems and the different levels and sectors of education preserve their autonomy? How far should their development be integrated into an overall system?

Efforts to revise the articles on education in the Constitution(1)

In its message of 19th January 1972, the Federal Council submitted new draft articles on education and research in the Constitution to the Federal Assembly.

The article on research (now Article 27(6) of the Federal Constitution) authorises the Confederation to promote scientific research and its co-ordination.(2)

In using the term "articles sur l'enseignement" (articles on education) rather than "articles sur l'école" (articles on the school system) the Federal Council showed its desire to express

> "the change which has occurred in the concept of education. Training is not a process which is completed once and for all with the conclusion of school education and vocational training but is a lifelong effort by the individual to improve his knowledge. Although lifelong education is a matter for the free decision of the individual the state is nevertheless bound to promote the requisite conditions". (Message, p.4)

In its statements on adult education the Federal Council reached a conclusion which reflected future thinking on recurrent education:

> "... Adult education in the form of continuing training will also have major repercussions on reforms affecting other levels of education. Activity in all sectors and at all levels of education must be co-ordinated to ensure that every individual

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1) The origin of this amendment to the Constitution was a motion for a referendum tabled in 1969 by "Jeunesse du Centre", a group affiliated to the Parti Suisse des Paysans, Artisans et Bourgeois (the PAB, now the UDC) (see Feuille Fédérale 1971, volume II, p.1001). As a counter-proposal, the Federal Council drafted the education articles referred to above and this led the authors of the motion to withdraw it. The education articles were subsequently accepted by the Federal Assembly but rejected in a referendum (see p.7).

2) The article on research in the Constitution /Article 27(6)/ concerns the present report only as the basis for the encouragement of educational research.

is prepared and has an incentive to supplement and update his knowledge throughout his existence in response to constant changes in knowledge" (p.25).(1)

The draft text of the Federal Council inserted into Article 27 of the Constitution "the right of every inhabitant to an education in accordance with his abilities" (p.50). This right also covered lifelong education (p.51). A new article 27(2) states that "education is a joint concern of the Confederation and the cantons" (first paragraph). The Confederation should, inter alia, be empowered "to make fundamental arrangements for the organisation and development of secondary education, higher education and adult training and the provision of financial aid to training" (paragraph 4b).

In the debate in the Federal Assembly the Federal Council's draft text was amended on three points:

- The right referred to in Article 27, first paragraph, was given a broader basis: ("the right to training shall be guaranteed").
- Greater emphasis was placed on co-ordination between the cantons (Article 27 bis, paragraphs 2 and 5).
- The task of the Confederation, i.e. the promotion of post-school training, particularly for young people, was extended (Article 27(2), paragraphs 4b and 5).

On 4th March 1973 the articles on education and research were submitted to a referendum. The article on research was voted but the articles on education were rejected by a small majority. In actual fact, they were approved by a majority at the referendum (i.e. an absolute majority of votes) but not by the majority of states (i.e. cantons and half-cantons).(2) The total poll represented 26.5 per cent of the electorate, i.e. the smallest poll at any referendum since 1848.

How do the Federal authorities propose to act in the near future, in view of the situation? The National Council has approved three requests to the Federal Council to draw up new articles on education.(3)

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1) Message by the Federal Council to the Federal Assembly concerning the new articles of the Constitution on education and research - Article 27, 27(2) and 27(4) of 19th January 1972.

2) Under Article 123 of the Constitution, amendments to the Constitution require not merely a majority of votes cast but also a majority of Cantons, half-Cantons being counted as half votes. The Articles on education obtained 507,358 votes in favour and 454,463 against. With slender majorities, they were rejected by 11½ Cantons and accepted by 10½ Cantons.

3) Under constitutional law it would be possible to pave the way towards a revision of the Constitution by another referendum (requiring at least 50,000 signatures) or on the initiative either of a canton or members of the Federal Assembly.

Information on the short-term action envisaged was given in two speeches by Federal Councillor Hürlimann, Head of the Department of the Interior since 1974. Referring to the interdependence of the educational sectors, he stated:

> "As far as educational policy is concerned our country now faces a common destiny. The different sectors of education and its various levels are so closely linked that any solution which does not take this interdependence into account, with the consequent need for inter-canton co-operation in a federal context, is bound to be defective. Furthermore, the scale of the tasks which await us makes it essential to co-ordinate such resources as a small country can muster, which are perforce limited. The experience of the last few years, particularly the referendum on the new articles on education in the Constitution, has shown that the necessity for co-operation must be brought home to the public at large. What we need in our educational policy is a new spirit of co-operation at Confederation level". (26th October 1974).(1)

He spoke in favour of co-operative federalism and upheld the principle that education was a joint concern of the Confederation and the cantons. According to the sectors concerned, responsibility lay either with the cantons (e.g. primary education), the Confederation (the Federal Polytechnic Schools) or both (e.g. universities, vocational schools) (12th July 1974).(2)

As far as procedure was concerned, he stated that:

> "the Confederation lacks adequate powers, based on constitutional law, to enable it to co-operate in solving important problems of educational policy. The drafting of new articles on education must therefore be one of our permanent tasks and constitute the ultimate objective of the efforts we have made in educational policy at federal level. As in most of the articles of the Constitution, the difficulty does not lie in the drafting but in the creation of a solid political basis. The debate on the future legislation on aid to the universities and the new legislation on aid to the universities and the new legislation on vocational training now being drafted by the Department for Economic Affairs will certainly be a valuable contribution to this end. For this reason I would not wish to submit new

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1) Speech by Federal Councillor Hürlimann on the 125th anniversary of the Association Suisse des Enseignants at Lenzbourg on 26th October 1974. Published in the bulletin "Politique de la Science", no.5/1974, pages 622 to 626.

2) "Prospects for Educational Policy", address by Federal Councillor Hans Hürlimann at the meeting of the "Société Université et Recherche" at Zurich on 12th July 1974. See Politique de la Science, no.5/1974, pages 607 to 618.

> articles on education to Parliament with a view to a referendum until after the legislation on aid to the universities and on vocational training has been voted. In adopting this procedure I am prompted by the idea that the first step is to aim at feasible medium-term objectives, the achievement of which would provide the necessary policy basis for the next step, i.e. the approval of the new articles on education" (12th July 1974).

The views of the Conférence des Directeurs de l'Instruction Publique on more effective co-operation between the Confederation and the cantons emerge from a lecture by its Chairman, Dr. A. Gilgen, a Zurich state councillor, who stressed (1) that the educational concordat, apart from the provision relating to the beginning of the school year, had in no sense proved a failure.

> "In 20 cantons it has been ratified: in 11 cantons, all the compulsory provisions have been given effect; in a few cantons some of these provisions are in force".

As such social and political requirements as equality before the law, freedom to settle anywhere in Switzerland, the development of internal migration, equal educational opportunities, etc. call for inter-canton adjustments, reliance must be placed, as in the past, on the public urge to co-ordinate and co-operate.

> "If a step-by-step policy is the only feasible one in certain cases this is due not so much to the absence of any new educational design but to the nature of the educational system".

Co-ordination is absolutely not an end in itself. It is solely a means of achieving the objectives it is designed to serve.

Education in the programmes of political parties

The account we have given of the efforts made to revise the articles on education clearly indicates the guidelines and objectives of the federal authorities. Other general prospects regarding the development of educational policy in Switzerland may be seen from the programmes of the political parties.(2)

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1) State Councillor A. Gilgen: Problems of Reform and Educational Co-ordination: Report to the 9th Plenary Session of the Conférence des Organisations Suisses d'Enseignants (Conference of Swiss Teachers' Organisations), 29th November 1974 at Olten. Published in the "Schweiz. Lehrerzeitung", 119th year (1974), no.49, p.2144.

2) The reference to the party programmes in this report is prompted by the idea that the programmes are the result of party discussions and are comparatively representative of the objectives and values of our composite community. This assumption would have to be verified by research. For example, it would be worth finding out who participates and to what extent in the preparation of these programmes and how far their objectives tally with the practical achievements of educational policy.

Within its narrow limits the report will have to be confined to the four main parties represented in the Federal Council.

In its programme for 1971, the PDC (Parti Démocrate-Chrétien Suisse) claimed "the right of every individual to education" (recommendation 46). "Our system must be dynamic in its outlook; it must offer the broadest possible range of personal education, ensure equality of opportunity and promote the greatest possible social permeability" (49). The PDC proposes to "achieve equality of opportunity by fostering individual skills" (47). It urges the "co-ordination of the various canton educational systems" and states that "in the medium term it is essential to work out the general scheme of co-operation between the Confederation and the cantons at all levels of education and vocational training"(50). The PDC emphasizes the need for joint educational planning by the Confederation and the cantons based on extensive educational research. It wants encouragement and aid to be given to the information, planning and co-ordinating offices set up by the Conference des Directeurs Cantonaux de l'Instruction Publique (Conférence of Canton Directors of Public Education). The Confederation and the cantons must jointly set up a training and research council (62). In a draft programme for 1975 (1) the PDC calls for the resumption of efforts towards the revision of the articles on education.

In its draft programme for 1975 (2), the PRDS (Parti Radical-Démocratique Suisse) states that even in a period of financial difficulty education is a priority task. Initial inequalities of birth and environment must be eliminated as far as possible (non-discrimination, equality of opportunity). Chances of switching from one channel of training to another must be held open as long as possible (permeability). This claim calls for overall educational planning at canton and Confederation level.

Co-ordination within and between cantons must be pushed forward energetically. However, there is no question of delegating to some superior authority what can be administered just as well or even better at a lower level. This is true at commune, canton and even federal level. The draft programme calls for work to be started again immediately on the drafting of an article on education for the Constitution adapted to our present age. The draft article would have to be submitted to referendum by 1979.

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1) This draft has not yet been approved by the PDC congress.

2) The draft has not yet been approved by the party and the text is still provisional. With the permission of the Secretariat of the PRDS we propose to outline the party's recommendations on educational policy. Its present programme goes back to 1971.

The UDC (Union Démocratique du Centre) is in favour "of a system of education offering full equality of opportunity (equal educational opportunities for equal abilities) at all levels of education from the infant school to the university and from vocational schools to adult education. All these sectors must be organised and aided equally". (UDC Programme 1972, p. 20). The party calls, amongst other things, for "the possibility of switching from one occupation or course of training to another within the various types of school" (151) and "equal chances of training as between urban and rural areas by the decentralisation of training institutions and the equalisation of transport costs" (155 and 156). "Co-ordination (educational) ... must be speeded up and related to an appropriate article in the Constitution." (p. 20) The UDC calls for "global educational research" (p. 21).

In its manifesto of 1971 the PS (Parti Socialiste Suisse) calls for "the right of every individual to optimum education in accordance with his abilities and vocation" (p. 16). This claim can only be made good in "an integrated system" (common core) covering all normally endowed children at all levels". If the necessary institutions (homes and kindergartens) are established, equality of opportunity will be guaranteed from the beginning of the child's school life. Permeability, both vertical (e.g. from the vocational school to the Ecole Polytechnique) and horizontal (e.g. secondary school to high school) must be ensured by a "global" and "integrated" educational system. The necessary basis on which objectives can be established and a global educational system built up must be decided at federal level. The Confederation "must be given powers to lay down a basic programme for the co-ordination of the various educational systems".

In its planning, the Confederation takes account of any linguistic regions which have already co-ordinated their respective systems (p. 17). The Confederation must, amongst other things, be given control over teacher training and university teaching.

In its "draft educational scheme" of 1974, the PS committee on education proposes the establishment of an educational council of experts with consultative and planning functions (p. 43).

Summary

Equality of opportunity is a postulate common to all the parties whose programmes have been quoted. The parties consider education as an overall system which covers all sectors of training from pre-school education to continuing training. Greater permeability between these sectors is advocated.

Co-operation between the Confederation and the cantons must be realised. In connection with the basic demand for educational planning and educational research two parties (PDC and PS) propose the establishment of an education and research council. The PRDS and the UDC ask for a further approach to the revision of the articles on education in the Constitution.

First attempts to achieve an overall design for education

The present educational system in Switzerland already contains the beginnings of recurrent education and offers certain conditions for its implementation. This is principally the case as regards the bodies for national co-ordination and planning already mentioned.

The Science Council and the University Conference were set up on the basis of the federal legislation on aid to universities which has already been mentioned and the Federal Maturité Board is a result of the ordinance on the recognition of maturité certificates.

Hitherto the sovereignty of the cantons has been absolute in primary education and partial as regards secondary education. Co-ordination and planning on a national scale were possible only because the educational concordat of 1970 was voluntarily signed by the 20 cantons. For this reason the Conférence des Directeurs de l'Instruction Publique (CDIP), with its committees and offices is in a key position to influence overall development.

Apart from the federal authorities and the CDIP, have any other steps been taken towards a system of recurrent education?

In connection with the articles on education, mention must be made of a motion put forward in 1972 by state councillor (now federal councillor) Hans Hürlimann of Zug. It requested the Federal Council to set up a Swiss educational council in order to ensure"that the overall educational system would in future be planned and organised jointly without prejudice to the powers of the federal and canton authorities". The educational council would have to be composed in such a way as to co-ordinate the work done by the Confederation, the cantons, the science and research authorities, the teaching organisations and the student bodies to achieve an overall educational system".

The Council of States approved the motion of 26th September 1972, but the National Council rejected it on 7th June 1973, after the articles on education had been rejected at a referendum. However, on 19th September 1973, the same demand was again put forward in the form of a subsidiary question in the Uchtenhagen motion.(1)

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1) "To this end (i.e. with a view to the judicious co-ordinated development of education) a joint body should be set up by the Confederation and the cantons". (Uchtenhagen motion, National Council, 19th September 1973).

In a recent report, Professor Eugen Egger, secretary general of the Conférence des Directeurs de l'Instruction Publique, recommended the establishment of a Swiss educational council "which would reflect our pluralistic society" and might be used in a permanent process of reform, jointly and globally planned.(1)

A new approach was made to the revision of the articles on education in the Constitution under the following three motions:

- Barchi, 5th March 1973,
- Müller-Marzohl (Lucerne), 25th June 1973,
- Uchtenhagen, 19th September 1973.

They invited the Federal Council to draft new articles on education and restated the principle that education is a joint task for the Confederation and the cantons. The three motions were reformulated as postulates leaving the Federal Council free to determine its time schedule.

A comparison between the parliamentary proceedings, the statements by the Federal Council and the party programmes shows that the principle of "co-operative federalism" has been maintained and that efforts to introduce this principle into the federal constitution are continuing.

As Messrs. Egger and Blanc pointed out in 1974,(2) basic decisions on education in a democracy like ours call for a lengthy briefing process to secure the support of the public. This explains why changes in the Swiss educational system often proceed rather slowly. But in this way there is less danger of setting up an educational system which is out of touch with the real needs of the public and has no popular roots.

PRIMARY EDUCATION: THE PRIMARY SCHOOL

Consequences of the concept of recurrent education

The previous chapter has shown that educational reform in Switzerland aims at fostering self-fulfilment, lessening inequality of educational opportunity (due to the child's sex or social origin),

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1) Prof. Eugen Egger: "Bildungsforschung, Bildungsplanung und Bildungspolitik in einer pluralistischen Gesellschaft". Address to the Association Patronale Suisse des Constructeurs de Machines et Industriels en Métallurgie (association of firms in the mechanical engineering and metal industries), at Leysin, see Schweizerische Blätter für Gewerbeunterricht, 100th year (1975), volume 1, p. 7, et seq.

2) Egger, Eugen and Blanc, Emile: "L'Enseignement en Suisse" (Education in Switzerland), Geneva, Centre Suisse d'Information et de Documentation en Matière d'Enseignement, July, 1974.

achieving greater permeability between the various branches of education, and providing more facilities for educational transfers between the cantons.

Attention must be drawn here to the fundamental importance of pre-school education (family, kindergarten and crèche) in safeguarding the individual's educational opportunities and his chances of lifelong education. As the present report is primarily designed to deal with lifelong education, it cannot dwell upon the problem of pre-school and primary education.(1) It is confined to two points which are directly related to the principle of "alternating periods of work and training".

- The child must gradually learn to make his own independent and responsible decisions so as to be able later to organise his own career and lifelong training. Amongst other things this means that he must have contacts with the world of industry and thereby learn to consider practical work and theoretical training not as two separate compartments but as two aspects of the same process.
- If these requirements are to be given effect, a system must be set up to provide recurrent education for teachers. Only a teacher who pursues a process of lifelong learning can train his pupils for lifelong education.

Preparation for the choice of an occupation and first steps in the world of work

Beginnings of recurrent education in the present system

As we have pointed out, compulsory schooling (the primary school) falls completely within the scope of the cantons but vocational guidance comes within the purview of the Confederation (its implementation being a matter for the cantons). Active co-operation has developed at many points between the primary school and the vocational guidance personnel.

Pupils in the top classes of primary schools are not only guided individually in their choice of an occupation but familiarised with the world of work by special lessons, visits to enterprises and periods

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1) The publication by K. Luescher, V. Ritter and P. Gross "Vorschulbildung - Vorschulpolitik" (Pre-school education, pre-school policy) (1972) gives a general survey of the controversy in German-speaking Switzerland. For information on the overall development of primary education, reference should be made to Mr. Egger's publication "Die Schweizer Schulen" (Swiss schools) which provides a survey of the educational position in the cantons for the educational authorities, child guidance officials, teachers and parents (1972). Reference may also be made to the study by Messrs. Egger and Blanc (1974).

of practical initiation. Several cantons have set up vocational guidance classes for this purpose (9th year of compulsory schooling). However, not all cantons and not all branches of primary education set aside time to prepare pupils for an occupation or introduce them to the working world. These two activities are often left to the initiative of the teacher himself.

Prospects

Referring to the relations between the educational system and the world of industry the Federal Council stated in its message of 19th January 1972, on the new articles on education in the Constitution:

> "The final years at the primary school (the 7th to the 9th year) prepare children for the choice of an occupation (...) The aim is to strike a fair balance between practical training in a manual occupation and general education. The pupil must be able to choose his career in full knowledge of all the opportunities open to him." (p. 9)

Several party programmes contain statements on the choice of an occupation. The PDC is in favour of "fostering the decision-making and critical faculty" (48)(1) and facilitating the "choice of an occupation by the establishment ... of vocational guidance classes and the introduction of short probationary periods in different occupations".(57) The PRDS wants "children to be able to pursue a common core of studies at school as long as possible, care being taken to ensure the optimum development of the faculties and talents of adolescents with a view to their future occupation and the continuation of their studies".(2) In the 1975 draft programme it advocates a cycle of guidance to give children an opportunity to realise their skills and tastes and facilitate the choice of their occupation by preliminary contacts with the world of work.

Young people who have reached their majority must be able to participate in planning their own training and lifelong education and must have already been prepared for this in their school life. In the words of the draft PS programme (1974, p.22) "basic education provides more especially for vocational activity and makes the process of learning, bringing one's knowledge up to date and continuing one's education, an enjoyable pursuit".(3)

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1) PDC Programme 1971, Recommendation 48.

2) PRDS objectives 71, pp. 27-28.

3) PS, draft plan for education (1974).

Training and further training of teachers

First steps towards recurrent education in the present system

The training of primary school teachers is a matter for the cantons.(1) It takes three forms:

1. At a teacher training school (boarding or day school) which takes young people immediately after their compulsory period of education and gives them a four or five-year training for the teaching profession. (Examples: Bern, Thurgall, St. Gallen).
2. At a higher training college which takes students with their maturité certificate and provides a course of three or four semesters leading up to the primary teaching diploma. (Examples: Zurich, Basle).
3. In university training courses for teachers which are open to holders of a maturité certificate. (Example: Geneva)

Continuing training (2) for primary school teachers in Switzerland is now being organised. Ten years ago continuing training was still largely in the hands of teachers' associations. The reforms and the new functions assigned to teachers have made it necessary for cantons to take over increasing responsibility in this field. Most cantons have legislation enabling them to require teachers to attend courses in certain circumstances (particularly when innovations are introduced into the educational system). Some cantons make it compulsory for all teachers to attend further training.(3) In the last few years a number of cantons have voted legislation for the further training of teachers (Vaud, Valais, and 11 German-speaking cantons). In several cantons, paid training leave is a legal right (in German-speaking Switzerland: Aargau, Bern, Solothurn, Thurgau, Valais, Zürich). Not only do all the cantons organise courses themselves but they also subsidise optional further training courses for teachers which are generally organised by the teachers' associations.(4)

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1) The Confederation has no direct influence except on physical education and its methodology (Ordinance of 7th January 1947, encouraging gymnastics and sport, article 9).

2) In accordance with international usage the term "continuing training" covers all training activities subsequent to basic education.

3) In canton Aargau, for example, every teacher is required to attend a 20-day training course after every five years of teaching.

4) A survey carried out on the instructions of the Pedagogical Committee of the Conférence des Directeurs de l'Instruction Publique provides information on the conditions under which teachers receive further training. For the survey in German-speaking Switzerland, see the "Lehrerfortbildung" Working Party (1974) and for French and Italian-speaking Switzerland, see Cavadini and Combes (1974).

The cantons are associated on a regional basis in the Conférence des Directeurs de l'Instruction Publique. Continuing training for teachers is co-ordinated within these regions.(1) Each canton recognises the others' training certificates. Instructors for the further training courses are also trained in these regions.(2) At national level the holiday courses of the Société Suisse de Travail Manuel et de Réforme Scolaire (Swiss society for manual work and school reform) which are held every year are subsidised by the cantons and attended by several thousand teachers.

The beginnings of recurrent education are primarily reflected in the wide range of co-operation between institutions responsible for teacher training and continuing training. The teacher training schools provide the classrooms and teaching equipment (e.g. audio-visual media). Instructors at teacher training schools are available as directors of continuing training courses or as lecturers.(3)

As far as the training and further training of teachers is concerned it may be generally said that circumstances are particularly conducive to the establishment of a systematic programme of recurrent education.

Prospects

After the rejection of the new articles for the Constitution, the organisation and co-ordination of teacher training and further training continues to be a matter for inter-canton co-operation.

In the concordat for educational co-ordination the signatory cantons advocate "equivalent training for teachers" (Article 3(g)). This also applies to continuing training. The pedagogical Committee has set up a sub-committee responsible for developing and co-ordinating continuing training for teachers.

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1) The Conférence des Directeurs de l'Instruction Publique consists of four regional groups: 1) north-west, 2) central Switzerland, 3) eastern Switzerland, 4) French- and Italian-speaking Switzerland. The first three regions are associated in the "Lehrerfortbildung" Working Party.

2) In eastern Switzerland, the Pestalozzianum of Zurich (non-profit-making foundation subsidised by the canton and municipality) is responsible for training instructors for teachers' courses. The Pestalozzianum is the teacher training centre for the eastern cantons.

3) The "Lehrerboutique" in canton Uri may be mentioned as an example. The Altdorf teacher training school is used on Wednesday afternoons as a workshop and meeting place for teachers on further training courses. Discussions, optional working parties and courses are organised with the help of teachers of educational science. Teachers in the canton may also avail themselves of the educational consultation facilities.

The Committee of Experts on the Training of Future Teachers may be expected to have a decisive effect on training and further training for teachers. As instructed by the Conférence des Directeurs de l'Instruction Publique, this committee has drafted a report which will be published in 1975.

Under the concordat of 1970 the Conférence des Directeurs de l'Instruction Publique consults the Conférence des Associations Suisses d'Enseignants (KOSLO/CASE) before submitting recommendations to the cantons. The Association Suisse des Enseignants (ASE) which is one of the biggest federations in the CASE expressed its views in 1973 with regard to continuing training for teachers.(1)

The ASE makes a distinction between further training (which enables teachers to obtain a better-paid function) and continuing training. According to ASE, the teacher is "largely responsible for his own continuing training". Continuing training should normally be optional. Compulsory courses must be limited to certain special cases (e.g. introduction of new teaching equipment) and should only be organised in co-operation with teachers' associations. The latter claim the right to participate in the preparation of training curricula and even to take over responsibility for continuing training.

The claim that "continuing training should be divided into phases representing certain periods in a career" and that teachers who pursue their training should be "relieved of a certain number of hours of teaching or granted leave" undoubtedly raises the issue of recurrent education. All the political parties mentioned express an opinion on the further training of teachers. In its brochure "Objectives 71" the PRDS focuses on the actual position of the teacher in the educational system. "Teachers must have opportunities to improve their proficiency throughout their career ..." (p. 29). This postulate is given further shape in the 1975 draft: continuing training and further training at all levels should be integrated into the overall design for teacher training. With this object in view it should be borne in mind that the differences between all the activities of those concerned with teaching and education are never fundamental but only relative. The UDC advocates co-ordination between the cantons to ensure "the selection, training and further training of a sufficient number of teachers and the creation of a teaching body with high standards" (1971, recommendation 143). This party calls for "compulsory further training courses for teachers at all levels" (144). In its 1971 manifesto (pp.16-17) the PS states

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1) The "recommendations for the continuing training of teachers" were approved in 1970 by the assembly of the delegates of the Association Suisse des Enseignants. (Schweizerische Lehrerzeitung, No.39, 1973).

"the training and further training of teachers will have to be reorganised in the light of future exigencies. The Confederation will have to be given powers to issue basic provisions governing the training of the teaching body and subsidise pilot experiments".

Problems of research

The questions raised in the previous chapter open up a number of aspects of research which are concerned with the report by the experts of the Conseil Suisse de la Science on the educational sciences.(1)

1. The Conseil de la Science attaches considerable importance to curriculum research. From the point of view of recurrent education, it is particularly urgent at the present time to devise a course of studies to prepare young people for the choice of an occupation and introduce them to the world of work and develop a corresponding plan for the training and further training of teachers.(2)
2. In the priority field of educational planning the Report on Research (Volume 2, p. 217) calls for the establishment of a recurrent system of training for teachers.
3. Mention should be made here of the recommendation in the Report on Research to allow teachers and educational administrators to co-operate in research projects of this kind.
4. The model for recurrent education must also be considered from the standpoint of the teachers' career. Investigations into the careers of teachers would probably support the view that a continuing training model of this kind would enhance opportunities of promotion within the profession, making the latter more attractive and encouraging teachers to continue in the career.

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1) Conseil Suisse de la Science, Report on research, Vol. 2, p. 209 et seq., Bern 1973.

2) In co-ordination with the Commitee of Experts on the Training of Future Teachers" a joint investigating committee of the Association Suisse pour l'Orientation Scolaire et Professionnelle and the Association Suisse des Enseignants has worked out proposals to integrate the themes "preparation for the choice of a career" and "introduction to the world of work" in the training and further training of teachers. These proposals are to be considered as part of the preliminary work for curriculum research in this sector. See Rauh (1974).

SECONDARY EDUCATION: VOCATIONAL TRAINING AND THE SECONDARY SCHOOL

Relations with recurrent education

The education provided by establishments covering the 10th to 13th years of schooling is now often referred to under the generic term: "second-cycle secondary education".

At this level, the following questions arise with respect to recurrent education:

- What reciprocal influences exist between general education and vocational training?
- To what extent is it possible to provide alternative courses of vocational training and general education?
- Has provision already been made for recurrent training (i.e. alternate periods of training and employment) in second-cycle secondary education?
- Are further training courses for secondary school teachers first steps towards recurrent education?

First steps towards recurrent education in the present structure of second-cycle secondary education

Unlike primary education, secondary education is not mentioned in the Federal Constitution, although it has developed uniformly under the influence of the Confederation on the basis of the federal regulations for medical studies. Pursuant to the federal legislation governing the medical professions,(1) the Federal Council issued an ordinance laying down the conditions under which a "maturité" certificate awarded by a school and recognised by a canton entitles its holder to sit for federal examinations in medicine as a means of access to medical studies.(2)

Holders of "maturité" certificates recognised by the Confederation may enter (usually without sitting an entrance examination) all federal and canton "hautes écoles" (institutions of higher education). Although the powers of the Confederation in the field of education are confined to medical studies, the cantons try to align their middle-level schools on federal requirements. The Federal "Maturité" Commission, set up by the Confederation, is responsible for the

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1) The Federal Act of 19th December 1877, relating to the right to exercise the professions of doctor, pharmacist and veterinary surgeon, is based on Article 33 of the Federal Constitution.

2) The current ordinance governing the recognition of "maturité" certificates (ORM) dates from 22nd May 1968 (amended on 18th December 1972). It recognises five types of "maturité" certificate in the following main sections: a) Latin and Greek; b) Latin and modern languages; c) mathematics and natural sciences; d) modern languages; and e) economic sciences.

supervision of teaching and examinations in schools preparing candidates for the "maturité" certificate, and it ensures that requirements are satisfied. It is also consulted on changes in curricula in these schools. The cantons may introduce types of "maturité" certificate other than those recognised by the Confederation, and each university is free to accept or reject holders of such certificates.(1)

Vocational training in Switzerland is primarily acquired through apprenticeship to a firm. Regulations laid down by the Confederation have hitherto governed the training and final examinations in 280 occupations.(2) Parallel with apprenticeships, courses are given in a vocational school (Gewerbeschule) on the basis of two half-days per week. Vocational training may also be acquired in an apprenticeship workshop or in a full-time vocational school (for example, commercial schools). The canton offices for vocational training are responsible for enforcing federal regulations.

In recent years several schemes and experiments have been initiated in Switzerland with a view to removing the traditional barriers between training in classical secondary schools (gymnases) and occupational apprenticeships.(3) Mention should first be made of the vocational secondary school (4) which provides sandwich courses for particularly able apprentices who have passed the entrance examination and whose firms, in addition to two half-days per week for compulsory courses in a vocational school, are prepared to grant them a further day off to broaden their general education and technical knowledge. The vocational secondary school facilitates the transition from secondary level to the "écoles techniques supérieures" (higher technical schools). However, it does not lead to a "maturité" certificate providing access to the "hautes écoles" nor to a school-leaving diploma comparable to the diploma in commerce. This new system is still in the experimental stage; by summer 1974 it had already been introduced into 23 schools.

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1) The canton "maturité" certificate has become uncommon since the recognition of "maturité" types D and E by the ordinance on the recognition of "maturité" certificates in 1972. It now exists in only a few teaching fields, fine arts and music.

2) Under the Federal Act on vocational training of 20th September 1963.

3) In 1974 the Conférence des Directeurs des Gymnases Suisses (The Conference of Directors of Swiss classical secondary schools) conducted an enquiry into current experiments in these schools. It emerged that the experiments tended to promote the differentiation and individualisation of education and did not seek to establish links with industrial life.

4) The legal basis for vocational secondary schools is a directive from the Office fédérale de l'industrie, des arts et métiers et du travail (OFIAMT) of 26th June 1970.

The secondary school preparing candidates for a diploma is midway between the second-cycle secondary school and vocational training. It offers a course of at least two years after the period of compulsory schooling. The commercial school diploma has been widely recognised for some decades and is regarded as equivalent to the certificate awarded at the end of a commercial apprenticeship. Certain communal and canton schools also provide a two-year diploma course.

The girls' training section ("Frauenbildung") of the "Höhere Töchterschule" (Girls' High School) in Zurich primarily provides training for the para-medical, social and teaching professions. Similar objectives are pursued by the further training school at Zug,(1) which was set up in 1972 after research, and offers each student practical training in preparation for the choice of an occupation during his two years at the school.

"Apprenticeship by stages" (Stufenlehre) may be seen as an attempt to introduce a recurrent system into basic vocational training. Under this scheme trainees must successfully complete their first stage of training before proceeding (immediately or eventually) to the second level which frequently involves differentiation and specialisation.(2)

Responsibility for the training and further training of teachers in vocational schools for industry and crafts and in applied craft and trade schools is assumed by the Confederation in collaboration with the cantons and trade associations (Article 27 of the 1963 federal Act on vocational training). The "Institut Suisse de Pédagogie Professionnelle" (Swiss Institute of Vocational Teacher Training) in Bern was set up in 1972 for this purpose and organises one-year full-time courses for vocational training teachers and two-year courses for teachers in general education. The basic courses are already a form of further training in themselves, but an advanced federal degree ("maîtrise") or teacher's certificate ("patente d'enseignant") and the corresponding practical experience are required first. Moreover, the Institute is introducing a system of further training courses which offer optimum conditions for providing recurrent education, especially as the OFIAMT (3) and the canton Offices for Vocational Training may jointly finance these courses. The

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1) Cf. "Die Weiterbildungsschule Zug", in a special number of the journal "Schweizer Schule", December 1973.

2) For example, training by stages exists for decorators and sales assistants as well as in the mechanical engineering industry.

3) OFIAMT: Office fédéral de l'industrie, des arts et métiers et du travail.

Institute is also to be responsible for setting up a Swiss centre for vocational training documentation, the testing of teaching material and specific research on vocational training.

The Confederation supervises occupational examinations and examinations for the "maîtrise" (Article 37 of the federal Act on vocational training). The Confederation may also authorise teachers to train apprentices provided that they have passed this examination (Article 10). It subsidises courses for the "maîtrise" and other types of further vocational training (Article 48).

As regards further training for secondary school teachers, the "Conférence des Directeurs de l'Instruction Publique" (Conference of Directors of Public Education) decided in 1968 - at the request of the "Société suisse des professeurs de l'enseignement secondaire" (Swiss Association of Secondary School Teachers) - to set up in Lucerne the "Centre suisse pour le perfectionnement professionel des professeurs de l'enseignement secondaire" (Swiss Centre for the Further Training of Secondary School Teachers). This Centre, which attracts more than 1,000 teachers to its courses each year and is currently developing a long-term course, also satisfies some of the major pre-requisites for a successful approach to recurrent education.(1)

Future prospects for vocational training and secondary education

In its Message of 19th January 1972, concerning the new articles on education in the Constitution (page 54), the Federal Council proposed the adoption of a provision to the effect that vocational training should be the responsibility of the Confederation.(2) This provision was primarily designed to enable the Confederation to provide greater access to vocational training, including higher technical schools, and improve the links between this sector and other forms of education.

In 1969, the "Conférence des Directeurs de l'Instruction Publique" appointed a commission of experts to study the future of secondary education ("Enseignement secondaire de demain"). This commission submitted its final report at the end of 1972.(3) As this

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1) The Lucerne further training centre is recognised as a university institute entitled to federal grants under Article 3 of the 1968 Act on university aid to universities.

2) Hitherto, the Confederation has had no general powers to lay down regulations governing vocational training. Article 34(3)(g) defines the five occupational fields for which it is responsible. Thus, for example, the Confederation is not responsible for professions in the social and para-medical sector, and these professions are not entitled to federal aid.

3) "Enseignement secondaire de demain" in "Politique de l'éducation", the yearbook of the "Conférence Suisse des Directeurs Cantonaux de l'Instruction Publique" (Swiss Conference of Canton Directors of Public Education), 58th Year, Huber, Frauenfeld, 1972.

was not an official publication of the "Conférence des Directeurs de l'Instruction Publique", the commission had considerable freedom to develop its ideas.(1)

This report on the future of secondary education regards permeability of structures as one of the fundamental principles of educational reform (page 88). It proposes an orientation cycle with horizontal sections from the fifth to ninth years of schooling (lower secondary level) and three sections at higher secondary level as from the 10th year of schooling: "maturité" certificate level, diploma level and vocational training certificate level, respectively covering periods of four years, three years and one to four years depending on the occupation. During the tenth year of schooling, there should be two-way permeability between the "maturité" certificate and diploma levels. Subsequently, such permeability should be maintained solely for students switching from "maturité" courses to diploma courses. Students at diploma level should be able to switch to vocational training courses but not vice-versa. According to the Commission's proposal, the diploma obtained at the end of the 12th year of schooling should provide access to a higher vocational school in technical and other fields, such as administration, social studies, teaching, economics, natural sciences or fine arts. The "maturité" level is divided into two sections: intermediate (tenth and eleventh year of schooling without final diploma) and terminal (12th and 13th year). A core curriculum of seven compulsory subjects and two options are required at the intermediate level, and four compulsory subjects and four options at terminal level. The "maturité" certificate should provide access without prior examination to all "hautes écoles" and faculties. A reinforcement of general education (vocational secondary school) should enable "apprentices who have both the desire and the ability to gain easier access to advanced vocational schools" (page 96).

As regards further training for teachers, the requirements formulated are in line with those of recurrent education:

- free hours to enable the teacher to participate in seminars specific to the school (for example, two hours per week each year);
- participation in seminars and conferences;
- sabbatical years or half-years;

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1) The Commission was composed of representatives of secondary school teachers' associations, the "Conférence Universitaire" (University Conference) and the "Conférence des Directeurs de l'Instruction Publique". The latter published the results of a discussion on the report which gave rise to lively debate among teachers and educational policy-makers. This issue cannot be discussed here as the "Conférence des Directeurs de l'Instruction Publique" has not yet reached a final decision on this report.

- seconding of secondary school teachers authorised to teach or do research in a university.

The political parties are also concerned with the issue of secondary education. Views on permeability are contained in all the party programmes examined. All advocate differentiation of secondary education according to the aptitudes and preferences of students. The PDC and UDC call for permeability between the various types of studies that lead to the "maturité" certificate. The PDC, PRDS and PS would like to facilitate transfers from vocational training to secondary education. The PDC and PRDS are in favour of vocational secondary schools. In its programme for 1975, the PRDS endorses the views set out in the report: "Enseignement secondaire de demain": "As permeability must not be abandoned at the level of post-compulsory schooling, the various types of school should be harmonised in terms of quality: vocational training needs upgrading but the status of the schools which prepare candidates for the "maturité" certificate must be maintained and they must also serve to prepare candidates for a final school-leaving diploma." The solution advocated by the PS is a type of comprehensive school which includes a vocational school.

All parties advocate the expansion of vocational training. The PDC, PRDS and UDC are in favour of maintaining the federal "maîtrise". In their programmes for 1975, the PRDS and PS consider that schools preparing candidates for the "maturité" certificate should focus more on practical work.

The parties even apply the idea of recurrent education (alternate periods of work and training) to basic vocational training in two ways: the PDC and UDC are opposed to a breakdown into highly specialised occupational apprenticeships and advocate apprenticeships to new and broader basic trades, thus facilitating access to any of several specialised occupations. Specialisation would come only at the further training phase. As regards the vocational schools, the UDC and PS suggest that they should give apprentices concentrated courses lasting several weeks instead of two half-days of tuition per week.

The PRDS explicitly demands more further training for vocational school teachers. The other parties include this demand under further training for teachers at all levels. The PRDS, PS and UDC are in favour of improving the training and further training of employers and also wish to introduce another feature of recurrent education at the upper secondary level by advocating that vocational and secondary school students should be entitled to participate in decision-taking (PS: right of co-management).

As the effects of recurrent education on vocational training can only be assessed in the light of economic and socio-political problems, it is only right that we should refer here to the views of the social partners. As the latter have not, of course, officially expressed their opinions on recurrent education, we can at present only refer to the statements made by the secretaries of the "Union Centrale des Associations Patronales Suisses" (Central Union of Swiss Employers' Associations)(1) and the "Union Syndicale Suisse" (Swiss Trades Unions Association).(2)

In his statements on vocational training, the secretary of the "Union Centrale des Associations Patronales" defined occupational apprenticeships in a firm as "an indispensable part of training", and he advocated an "ongoing reform of vocational training". He considered the vocational secondary school to be a decisive step in this direction. The secretary of the "Union syndicale" recommended a form of vocational training that would not simply prepare students for narrowly-defined functions immediately after completion of an apprenticeship, but "would give each person the flexibility and adaptability needed in constantly changing economic situations". He based his views on a proposal by the "Union Syndicale" concerning vocational training.(3)

Generally speaking, it seems that all the political parties and the social partners are in favour of greater differentiation and greater permeability within the upper secondary cycle and more broadly-based vocational training in schools. The need to expand further training for secondary school teachers and vocational training teachers (including employers) likewise seems to be uncontested. Any divergence of views can essentially be summed up in the following two questions:

- How far can permeability go, and what educational structure ensures optimum permeability?
- As regards vocational training, what degree of importance should be attached to vocational studies on the one hand and general education on the other?

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1) Dr. K. Hug (Secretary): "Perspectives de l'Union Centrale des Associations Patronales Suisses dans le domaine de la politique de l'éducation". Seminar on recurrent education organised by the "Centre Suisse de Coordination et de la Recherche en Matière d'Education" (Swiss Centre for the Co-ordination of Educational Research), Herzberg ob Aarau, 21st-23rd November 1974 (Working paper).

2) F. Leuthy (Secretary of the "Union Syndicale Suisse"): "Syndicats et éducation récurrente", ibid.

3) In April 1974 the "Union Syndicale Suisse" submitted proposals to the Federal Council for new legislation on vocational training. In particular, it requested:
   - the broadest possible basic vocational training;
   - training with a view to occupational flexibility and mobility;
   - a more broadly-based vocational training in schools and the provision of more general education;
   - equal responsibility for trade unions in the vocational training field;
   - participation of apprentices in decision-taking (co-management).

Mention should here be made of a parliamentary initiative relating to the ordinance governing recognition of "maturité" certificates (ORM). On 20th June 1974, the Federal Chambers adopted a motion requesting the Federal Council to include an article in the ORM to enable educational reforms to be tried out. It was explained in the preamble to the motion that it had not been possible to try out a number of previous curricula reforms in classical secondary schools (fewer compulsory subjects, system of options) because they were not authorised under the ORM.

Research tasks

Vocational training is marked out as a top priority area for research in the Science Council's report on research (Vol. 1, p. 111).

In terms of the present study, research involves the following problem: What would it cost the national economy and the education system if vocational training were expanded? These costs would have to be compared with the benefits in terms of occupational and general qualifications. Furthermore, it would be necessary to analyse the effects of the introduction of recurrent education at secondary level on the training and employment sectors:

- Would the introduction of a diploma level result in a smaller percentage of failures in secondary education?
- Would the introduction of apprenticeship by stages lead to fewer investment errors resulting from over-specialisation?

As regards educational planning (a priority area according to the report on research, Vol. 1, p. 111), consideration must be given to ways and means of achieving optimum permeability and efficient co-ordination (e.g. premises and teaching equipment) between secondary and vocational schools. The question of permeability between the secondary and tertiary sectors of education must also be examined from a general standpoint. What training channels connect the four levels of secondary education (occupational proficiency examination, vocational secondary school certificate, the diploma and "maturité" certificate) to the three levels of tertiary education (university, higher technical school, continuing education)? An analysis of this kind could provide a basis for harmonising the requirements governing the transition from secondary to tertiary sectors of education.

The problems of educational organisation and management which arise when a system of recurrent education is introduced at secondary level will have to be determined. In practice this would mean that the holder of a secondary school diploma could resume his studies after several years' employment in order to obtain the "maturité" certificate. This would also apply to anyone who had completed his studies at a vocational secondary school and wished to obtain the secondary school diploma after a period of employment.

In this connection, research would also have to be done on another question: what would be the effects on vocational schools and in-firm apprenticeships if the half-days at vocational schools were replaced by concentrated periods of training? What organisational problems must be expected?

The report on research explicitly recommends investigation into "the practical and theoretical approach to specialised training and general education" (p. 111). This calls for a comparative study of the curricula of secondary and vocational schools with a view to their co-ordinated development. A two-fold question arises: how can the secondary school curriculum be designed to establish greater contact with industrial life? How can the vocational school curriculum be designed to include more general education?

THE TERTIARY SECTOR OF EDUCATION (1)

The tertiary sector in the recurrent education system

The present report is concerned primarily with this level of education (particularly continuing education). Hitherto, it has seldom been possible in Switzerland to include all adult education institutions under the same generic term (universities, "hautes écoles", higher schools of specialised studies and continuing education establishments). Although the Federal Constitution certainly refers to "establishments of higher education" (Article 27), this term really only covers the "hautes écoles". However, it is now an increasingly common view that university problems can only be handled on the basis of an overall concept of higher education (the tertiary level).

The Swiss Delegation to the Second Conference of Ministers of Education of European Member States, which was held in Bucharest in 1973, summed up one of the conclusions of this conference in the following terms:

> "While the quantitative problem remains unresolved in Switzerland, it has to be recognised that a solution can only be found if post-secondary education is considered as a whole, i.e. by linking up university and para-university channels of training and providing at the same time for permeability between the two systems.(...) Higher education may be phased over different levels provided that - within a context of continuing education - all candidates can

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(1) This term is used in international classifications (OECD and UNESCO).

re-enter the education system. (...) An ongoing and viable relationship must be established with research on the one hand, and with practical and productive activities on the other."(1)

This quotation refers to three basic issues of recurrent education: the overall perspective, permeability, and the possibility of resuming studies at any time.

The objectives of the Third Report on the Development of Swiss Universities, which is now being drafted by the Swiss Science Council, are based on the same principles:

These quantitative problems relating to objectives "must be dealt with in a context which is broader than the limited university sector. In the Third Report on the Development of Universities, the Science Council will view the future development of universities in the context of the development of other fields in the tertiary education sector".(2)

On the basis of this overall view, the three areas in the tertiary sector must be examined from the standpoint of their interrelationships: universities, higher schools of specialised studies, and continuing education.

Universities

First steps towards recurrent education in Swiss universities

In the second part of this report (Chapter 1), the School of Psychology and Educational Sciences (EPSE) of the University of Geneva was cited as an example of the kind of establishment that provides recurrent education. In fact, from a structural standpoint, the EPSE must come closer to the model type of recurrent education than any other university institution in Switzerland. In particular, it meets the essential criterion, in that it offers students the possibility of obtaining a certificate by combining "training units" ("credits") which they earn during several training periods.

A report on continuing education in universities drawn up by the Swiss Science Council provides information on other initial forms of recurrent education in the ten Swiss universities.(3) This report

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1) Extract from a report by Professor Eugen Egger (Geneva), General Rapporteur of the Conference, published in the bulletin: "Politique de la Science", February 1974, p.250.

2) Swiss Science Council: "Troisième Rapport sur le Développement des Universités Suisses"; Bulletin: "Politique de la Science", March 1974, p. 324.

3) "La politique des Universités Suisses en ce qui concerne l'Education Permanente et les Etudes Post-diplôme" ("The policy of Swiss universities with respect to continuing education and post-diploma studies") Swiss Science Council. Bodies responsible: Institut Romand de Recherches et de Documentation Pédagogiques (Professor S. Roller); Centre Suisse de Coordination pour la Recherche en Matière d'Education (A. Gretler). Rapporteur: R. Gurny. May 1973.

reviews the present situation as regards continuing education and post-diploma studies in the ten Swiss universities (excluding medical studies). The universities essentially offer two possibilities for continuing education (page 35):(1)

- "auditors" (non-matriculated students);
- post-diploma studies (third cycle).

Courses taken by candidates preparing a doctorate in German-speaking Swiss universities do not come under continuing education in the strict sense since an intermediate examination ("licence") was introduced a few years ago into the original cycle of studies leading directly to a doctorate (page 48).

The universities also organise further training courses which are usually intended for business executives, technologists, primary and secondary school teachers, university professors, priests and pastors. Out of 48 courses examined, 12 essentially represented further training with a view to promotion and 30 were refresher courses.

The five French-speaking "hautes écoles" co-ordinate their post-diploma studies (third cycle). Agreements have been signed and joint commissions set up in five fields of study (page 51). Moreover, the five "hautes écoles" collaborate with the regional employers in the "Communauté Romande pour l'Economie d'Entreprise (COREDE)" which organises seminars for managerial personnel. These courses are often strung together to form fairly lengthy programmes (page 54). The faculties of theology jointly offer further training seminars each year for ministers of religion engaged in pastoral work (page 55).

The University of Economic and Social Sciences at St. Gallen provides a relatively advanced form of recurrent education. It is the only Swiss university offering facilities for continuing education which are built into its original structure and served by a number of standing institutions: a board and a deputy for continuing education and a council of former students whose members participate in decision-making. Five types of seminar are organised on a regular basis, primarily for persons in responsible positions in industry, trade and government and for teachers in commercial schools.

A system of concentrated recurrent education, the "St. Gallen Management Model", is currently being organised on the principle of "credit units" awarded for a large number of permanently available short courses which can be combined into individualised training programmes. Components are regularly supplemented or replaced.

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1) Furthermore, the universities concern themselves with the open universities in various ways, either by integrating them (e.g. the University of Basle) or by making available their premises and facilities and giving their staff teaching responsibilities at the open university in their free time.

Recurrent education and university development prospects

Opinion of the authorities

In its Message of 19th January 1972 (page 22), the Federal Council expressed the following views with respect to educational reform:

> "As a result of the rapid changes and increased mobility in the professions open to university graduates, students must be more prepared than in the past for a wide range of activities".

Federal Councillor Hürlimann went a step further in his statement of 12th July 1974:(1)

> "The university graduate, in particular, must continually update and revise the knowledge he acquired as a student since it quite rapidly becomes inadequate. (...) Apart from a few exceptions, Swiss universities have not yet assumed responsibility for this task on a systematic basis, as indicated in a study by the Science Council.(2) However, it is in their own interest not to shirk this responsibility. It is worth considering whether a well-organised programme of continuing education might not help to lighten initial training programmes. By transferring specialisation to continuing education, it would be possible to curb the increasing tendency to lengthen initial studies".

The Director of the Federal Office of Science and Research took up this idea at a conference on 29th November 1974.(3) He proposed that university studies should be limited to a basic programme that would still leave considerable scope for specialisation. Initial specialised training would be acquired through a new form of continuing education along the lines of recurrent education. The Confederation would accordingly be relieved of responsibility for university studies, but would have to provide substantially more financial resources for continuing education. The speaker pointed out, however, that such a change would not be possible on the basis of the existing provisions in the Constitution.

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1) Statement by Federal Councillor H. Hürlimann at the congress organised by the "Société Université et Recherche", in Zurich on 12th July 1974.

2) Federal Councillor Hürlimann is referring here to a report on continuing education by R. Gurny.

3) Professor U. Hochstrasser: "Education policy in Switzerland after the rejection of the new articles on education in the Constitution". A statement made at the 9th Plenary Assembly of the Conference of Swiss Teachers' Associations in Olten on 29th November 1974.

In its Second Report on the Development of Swiss Universities, in 1972, the Swiss Science Council had already drawn attention to the distinction between regular studies and continuing education as one of the four main guidelines for university policy. Regular studies should cover eight or nine semesters, leading to proficiency in an occupation, and be restricted to essentials. Research, specialisation and interdisciplinary studies should be the determining feature of continuing education. Retraining is defined as another new task for the university.

In 1972 the Swiss University Conference adopted proposals for new legislation on the universities which was also designed to provide directives for curriculum reform. In particular, the Conference considered that the legislation should include the following provisions:

- "where applicable, studies should be broken down into groups;
- post-diploma training and retraining should be promoted;
- where applicable, theoretical training should be alternated with employment in the occupation".(1)

(The last suggestion is consistent with the principle of recurrent education. However, it is formulated as a possible proposal only).

Views of the political parties

The four "government parties" have also given their views concerning the structure of the university.

The PDC would like to fix a maximum period of study for all types of education. Co-ordination among the universities should be organised more effectively (1971, Recommendation 56).

The PRDS (Programme for 1975) regards the university as only one of many possible forms of training in the tertiary education sector which must be integrated with all higher technical schools within a comprehensive concept of tertiary education. The PRDS recommends "on-the-job training" (alternating periods of study and work) with a view to developing the links between education and practical life.

The UDC advocates a university which, in particular, "adjusts curricula and examination criteria to meet new requirements while preserving the quality of training" (Recommendation 179, page 23).

The PS (1971) calls for a basic plan at national level to coordinate education and reform curricula adopting the "principle of credit units". The university is defined in its Programme for 1975

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1) Annual Report of the Swiss University Conference, 1972, page 62.

as one of many sources of adult training, and must therefore be reorganised on the principle of a comprehensive university (see also page 78).

Plans for the new universities (Universities of Lucerne and Aargau)

The discussions held in the cantons of Lucerne and Aargau during the planning for the new universities were considerably more concrete than the statements made by the federal authorities and parties. The planners in both cantons exploited the fact that conditions were particularly favourable for the development of a recurrent education system.

The University of Lucerne seeks to prepare curricula leading to a final diploma and doctorate, mainly in the following fields:(1) natural sciences, giving priority to environmental research; lower and upper secondary school teaching; counselling and planning in the social sciences (e.g. career or educational advisers).

All training is provided in the form of course units ("curriculum components") which the student can combine into an individual curriculum according to the principle of "credits". He will be awarded the diploma after obtaining the certificate for each component of the curriculum. In this case, it should be possible to alternate periods of study and employment.

The university for educational sciences,(2) which is planned in Aargau, is already defined as an institution for continuing education. It will be limited to candidates who have completed their university studies or received teacher training and had several years' practical experience. It offers complete courses of study in the following fields: teacher training, educational counselling, educational planning and management, continuing education, and social work. The courses are broken down into normal studies (full-time) and "on-the-job" training (during employment). At least one period of on-the-job training is planned for each period of normal study. On-the-job training carries credits which can be counted towards a diploma or doctorate. As in Lucerne, all training is broken down into "training units" (study topics) with which the student can devise his own individual curriculum. The student can call on the assistance of a study counsellor for this purpose.

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1) Message from the Council of State of the canton of Lucerne to the legislature ("Grand Conseil") concerning the legislation founding the university (27th May 1974).

2) Report to the Council of State by the Committee for the Foundation of the University of Aargau, February 1975.

Summary

The few points we have made in connection with university policy and planning have a number of aspects in common.

1. The university as a recurrent education system
   - The shortening of basic courses of study by the reduction of over-specialisation;
   - the transfer of specialised training to the continuing education sector;
   - willingness to consider practical experience in an occupation as a qualification for admission to a course of study;
   - the breakdown of training courses into credits which can be combined for the award of the final certificates;
   - alternation of periods of study and employment (re-training).
2. The university as a component of the continuing education system
   - Recurrent further training for graduates (through systematic on-the-job training);
   - traditional availability of the university to the population as a whole ("auditeurs", open universities).

Higher schools of specialised studies ("Ecoles supérieures specialisées")

First steps towards recurrent education

The term "higher school of specialised studies" covers a large number of institutions (run by various authorities) with the following common characteristic: the basic entrance requirement is completion of a secondary school education which, depending on the school attended, is practical (occupational proficiency certificate) or theoretical (diploma or "maturité" certificate). They prepare students for positions of responsibility requiring not only a high level of proficiency but also management skills.

They offer full-time courses which cannot be alternated with periods of employment (and, where applicable, parallel training courses during employment).(1)

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1) According to this classification, higher technical schools (including "technicums du soir", i.e. higher technical schools offering evening classes) belong to the category of higher schools of specialised studies, whereas training acquired exclusively during employment is classified as continuing education.

However, permeability with continuing education is common in various schools of this type. Even the "frontier" between these schools and the university is often permeable, depending on the subsequent occupation.(1)

The higher schools of specialised studies are a sector which has not yet been adequately surveyed and a considerable number of enquiries would be needed to obtain an overall view.(2) The training provided by these schools can be roughly classified into nine types:

1. Teacher training for primary and secondary school teachers, which depends on the cantons and is partly provided by the university and partly by specialised institutions.
2. Training for engineers and technologists in the higher technical schools (ETS or "technicums"). In Switzerland, there are 15 full-time ETS and 8 providing evening classes. These schools are governed by federal legislation (Vocational Training Act, 1963, articles 45 and 46).
   Mention should also be made of the agricultural ETS and other higher schools of agriculture which likewise come under the Confederation..
3. The training of technicians (intermediate level between an apprenticeship and ETS engineering training) was recently introduced in five towns and a number of large firms.
4. Training for social workers is provided in 10 specialised schools (two of which offer only part-time training). All these schools are run by private institutions. They have common work programmes and have harmonised their curricula and examination requirements.
5. Various courses of training for the para-medical professions (and specialised para-medical professions). The Confederation is not empowered to legislate in this field. Most of these training courses are run by the Swiss Red Cross.

The following should also be mentioned:

6. Higher schools of economics and administration;
7. Advanced training in computer science;
8. Schools of music and fine arts;
9. Various other specialised institutions, such as hotel and catering schools, interpreters' schools, etc.

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1) For example, social workers are usually trained in higher schools of specialised studies, but also partly in universities (e.g., Fribourg), and this also applies to lower secondary school teachers.

2) An initial outline will be found in a working document of the "Centre Suisse d'Information et de Documentation en Matière d'Education" in Geneva. Authorisation to refer to this study was obtained from the author (Boillat, 1974).

Only higher technical schools are covered by the agreements under which candidates who have completed their training in higher schools of specialised studies may enter university. The higher technical schools recently concluded an agreement with the "Conseil Suisse des Ecoles" (a body supervising the two Federal Polytechnic Institutes) under which students who have completed their training in higher schools of specialised studies may, provided their examination results are satisfactory, be admitted to the fifth semester of studies (in their field) by taking an additional one-year course.(1)

Collaboration between some higher schools of specialised studies and the continuing vocational education system, notably in the case of para-medical training and schools for social workers, seem to represent a first step towards recurrent education. Continuing education curricula are developed in collaboration with the "Association Suisse des Assistants Sociaux".(2)

It may be noted that higher schools of specialised studies do not receive a degree of recognition among the public that would be commensurate with their real importance to the economy and the community but are somewhat overshadowed by the universities.

Prospects

In its Message of 19th January 1972 (page 57), the Federal Council drew attention to the relations between the various sections of the tertiary education sector. It proposed that the Confederation should be empowered to introduce basic legislation on "higher education". This general term was chosen "to avoid creating an obstacle to any future development":

> "As regards the organisation and development of the "hautes écoles", any training policy should also take account of the requirements and possibilities of higher technical education (higher technical schools, higher schools of commerce and administration). One of the most important problems that will arise in the near future will be the rational distribution of tasks between these two types of establishment".

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1) There are also agreements with the faculty of philosophy and natural sciences at the University of Bern for the admission of candidates who have completed their studies in a higher technical school (ETS). In addition, agreements exist between the universities and teacher-training colleges for the admission of future teachers to specific fields of study.

2) Specialisation in a particular field, such as community work, supervisory activities or family therapy, can be acquired by taking courses during employment.

In its "Third Report on the Development of the Universities",(1) the Swiss Science Council - as already indicated - will examine the university in the overall context of tertiary education. One of the objectives is to construct variable macro-models of university functions in the tertiary sector, (e.g. the open university, comprehensive university, school of management, "elitist" university, research university, or a mixed form).

So far as the four main political parties' programmes for 1971 are concerned, only the UDC mentions the higher schools of specialised studies. This party advocates the promotion of higher technical schools and higher schools of agriculture ("technicums agricole") (Recommendation 167). In addition, the PS draft programme for education (Programme for 1974, page 27) proposes that the universities should be re-organised on the "comprehensive" principle and take over "para-university training schemes" (the PS here means higher specialised training as understood in this report). (See also p.74).

Since 1971, two proposals in the Federal Chambers have dealt specifically with the regulations governing higher specialised training in the 1963 Federal Act on Vocational Training. The Müller proposal (Lucerne, 30th November 1971) invited the Federal Council to place the higher schools of commerce and administration on the same footing as the higher technical schools when amending the Federal Vocational Training Act. The Rüegg proposal (29th February 1972) advocated that this law should also cover the training of technicians and management specialists. The two proposals were adopted by the National Council.

Continuing education

Continuing education, which has tended to be neglected so far, will assume a major role in the recurrent education system, which is why we decided to give examples of continuing education in the first part of this report. The general term "continuing education" is here understood to cover continuing training, further vocational training and the general education of adults. (These terms have different meanings in some of the texts quoted).

In order to introduce the recurrent element into continuing education, the following requirements are particularly important:

- The training must be understood as a life-long process and continuing education must be seen as part of a comprehensive training system.

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1) The Third Report on the Development of Swiss Universities is due to be completed in 1976. Cf. the Bulletin: "Politique de la Science", 3/1974, pages 317 et seq.

- At the employment stage, opportunities must be created for the introduction of recurrent (repeated) periods of training throughout the employee's working life.
- In continuing education, permeability is increased through the co-ordination of training possibilities and the standardisation of requirements for admission and the award of certificates. The kind of continuing education envisaged can be extended over long periods by means of schemes based on combinations of training modules.
- In order to reach the largest possible number of candidates, it is necessary to develop existing opportunities. This calls for the training and further training of the specialists required.
- Teaching methods suitable for adults must be devised.

It may be wondered how far these requirements are already met by the existing structures of continuing education and current policy objectives.

First steps towards recurrent education in continuing education schemes

This paragraph will deal separately with further vocational training and general education for adults in conformity with existing federal legislation.

Further vocational training

At national level, only further vocational training has a legal basis in Switzerland. Article 44 of the Federal Vocational Training Act of 20th September 1963 reads as follows:

> "The Confederation shall provide grants or other measures to promote the further training courses organised by the cantons, vocational schools, applied craft and trade schools, specialised schools, trade associations or other institutions." (page 14)

The legal basis for occupational retraining is laid down in the Federal Act on disability insurance (1958):

> "The insured person shall be entitled to be retrained in a new occupation if his disability renders such retraining necessary and if it is likely that his earning capacity will accordingly be safeguarded or notably improved.
> Training for different tasks in the same occupation shall be regarded as retraining." (Article 17, paragraphs 1 and 2).

In this connection, the disability insurance regulations state that:

> "The insured person who is entitled to be retrained in accordance with Article 17 of the Act shall be eligible for insurance benefits to cover the cost of his training, board and lodging in the vocational training establishment." (Article 6) para. 1.

The Federal employment service Act (1951) contains provisions for occupational retraining and further training. The Confederation may provide grants for the training, further training and reintegration of persons seeking employment.

The Federal unemployment insurance Act (1951) provides for daily allowances to members of unemployment insurance schemes for retraining or further training under certain circumstances (unemployment, approval by the canton employment office) (Article 20).

At its session of 25th September 1968, the Federal Committee of the "Union Syndicale Suisse" recommended that its affiliates should propose the introduction of educational leave in collective negotiations. Such leave should cover a period of five or six working days each year for attendance at trade union, occupational and general education courses. Among the trade associations which grant educational leave, mention may be made of the "Union Suisse des Lithographes" (USL) whose collective agreement relating to skilled workers has provided for three to six days' leave each year since 1st May 1972.

Paid educational leave is beginning to be introduced in collective agreements in the mechanical engineering and metal-working industries and in other major sectors of the economy (textiles and chemicals). Provisionally, members of works councils and staff associations are entitled to continuing education courses.

Other associations compensate loss of earnings in some circumstances. For example, the "Fédération Suisse des Ouvriers sur Bois et du Bâtiment" (FOBB)(1) subsidises certain training and further training out of a joint fund and allocates grants to its members for individual further education (e.g. correspondence courses).

Some associations, for example those forming the "Union Fédérative du Personnel des Administrations et des Entreprises Publiques,(2) grant neither educational leave nor compensation for loss of earnings. One to two days' leave may at present be granted for the training courses of these associations where members of the administration serve as lecturers.

As far as the cantons are concerned, the only example of paid educational leave is that offered by the Canton of Geneva. For

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1) The new name is: "Syndicat du Bois et du Bâtiment".

2) This also applies to the members of the "Union Syndicale Suisse": "Union PTT", "Fédération Suisse des Cheminots", "Fédération Suisse du Personnel des Services Publics", "Union Suisse de Fonctionnaires PTT", "Association Suisse des Fonctionnaires des Télégraphes et Téléphones" and the "Fédération Suisse du Personnel des Douanes."

almost 20 years its Department for the Public Economy has compensated any earnings lost by participants in the courses organised at the "Université ouvrière de Genève" for trade union officials.(1)

To ensure a steady supply of managerial staff, a number of firms offer their employees opportunities for further vocational training (cf. the case of the PTT in the second part of this report). In such cases the adult training usually includes relatively little general education.

In many large firms this further vocational training is organised on the basis of in-service courses. In other courses it is provided by institutions set up and run by several firms for the joint training of their managerial personnel, such as the university institutes (cf. Chapter 5), international institutes (for example, the Business School) and some of the institutions organised jointly by firms and universities.(2)

General adult education

Aid for general adult education is mainly provided at cantonal level (sovereignty of the cantons). There are at present a number of special legal provisions for the promotion of adult education in three cantons (Graubunden, Ticino, Valais). In four cantons, support is provided for adult education under an Act promoting cultural activities (Zurich, Schwyz, Solothurn, and Aargau) and, in four others, under the general provisions of the legislation on education (Lucerne, Obwalden, Basle-Town, and Geneva). Other cantons support adult education in the context of their general responsibilities in connection with the promotion of cultural activities.

Federal aid for adult education through the agency of the "Fondation Pro Helvetia" (Federal Law of 17th December 1965) has always been considered a temporary solution. This foundation, which granted Sw.Frs.406,000 for adult education in 1973, limits its grants to non-recurring schemes. These grants are primarily used to support federations and subsidise certain courses and the training of supervisory personnel.

Responsibility for most adult general education is assumed by the private sector. Thirty institutions, several of which are themselves federations, are grouped together in the "Federation Suisse pour l'Education des Adultes" (FSEA), ("Swiss Federation for Adult Education") a politically independent, non-denominational organisation which seeks to support the efforts of Swiss adult education institutions at canton, regional, national and international levels.

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1) A member of the "Association des Universités Populaires Suisses".

2) Cf. the "Communauté Romande pour l'Economie d'Entreprise" (COREDE) which is referred to in the chapter on universities (pp. 71 et seq.).

Apart from institutions associated with business firms, member organisations have only limited financial resources. They therefore rely for their training activities on relatively high contributions from their participants.(1)

Both general education and further vocational training for adults are also provided by profit-making institutions, namely members of the "Association Suisse de l'Enseignement par Correspondance", the "Union Suisse des Ecoles par Correspondance", and the "Fédération Suisse des Ecoles Privées" (FSEP).

In addition to officially organised adult education courses, mention should be made of groups which are formed voluntarily for the purpose of continuing education in connection with educational experiments or nursery schools, for example.

Prospects for continuing education

Under this heading we shall examine the extent to which the prerequisites for recurrent education to which we referred initially are already combined in the objectives of education policy in Switzerland. The distinction made between further vocational training and general adult education will be disregarded in this paragraph.

In addition to the Confederation, the Conférence des Directeurs de l'Instruction Publique and the political parties, mention must be made of the Fédération Suisse pour l'Education des Adultes (FSEA). It must also be noted that employers and trade unions play a particularly important role, especially in further vocational training. At a seminar on recurrent education held from 21st to 23rd October 1974, the secretaries of the two social partners set out their views on recurrent education.

The Confederation and the Cantons

On the basis of the replies to a circular addressed to the cantons (1969), the Message of the Federal Council concerning the new articles on education and research in the Constitution took the view that the Confederation's principal task in adult education was to support the Swiss federations in order to enable them to organise their activities with respect to consultation, co-ordination and education. The Message also stressed the importance of television in continuing education: "When Swiss television programmes are compared with those of some other countries, the conclusion is that

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1) Contributions by participants are higher in Switzerland than in other European countries (Cf. University of Aargau: preparatory phase: Report by the Working Group on Adult Education, Aargau 1974).

our education programmes need to be developed rapidly. This would also be by far the most effective way of helping to increase possibilities of cultural development in isolated rural regions" (page 26).

The Message did not refer to further vocational training, which is covered by special legislation.

Circular No.10 of the Conférence des Directeurs de l'Instruction Publique (8th August 1970) invites the cantons to promote adult education, which is defined as an integral part of public education. Various recommendations relating to education and teaching are addressed to the canton, regional, and communal authorities, as well as to architects.

The establishment of training, cultural and leisure centres is proposed as a long-term measure. Furthermore, the architecture of new school buildings must be planned with a view to their potential use for adult education. For the time being, specially adapted school premises must be made available for the organisation of courses for adults.

The "Fédération Suisse pour l'Education des Adultes" (FSEA)
(Swiss Federation for Adult Education)

In a resolution adopted at the 19th ordinary assembly of delegates (1970: "Yes to the reform of education - including adult education"), the FSEA considered continuing education in the context of the system as a whole:

> "As far as adult education is concerned, the basic requirement in any future education and teaching system is that each person, irrespective of sex, social origin, age and nationality, should have an opportunity of access on an equitable basis to training in any field and at any level of the system" (page 9).

This demand implies an increase in the range of training available:

> "The basic apprenticeship training must be supplemented and extended by a whole spectrum of training possibilities which, at the right time, will enable the adult to adapt his knowledge and practical experience to meet the latest requirements" (page 6).

Access to further education should not be made more difficult by unduly difficult examinations, inflexible curricula or administrative measures (page 3).

The FSEA calls for the co-ordination of further vocational training and general continuing education and considers it important to maintain a balance between vocational training and general, humanistic and cultural training in the public sector (page 13).

The demand for the development of continuing education and its integration into the education system on a legal basis is combined by the FSEA with the following additional proposals:

- the introduction of educational leave on a legal and contractual basis;
- the opening of schools for adult education;
- the establishment of schools and training schemes for teachers in adult education;(1)
- the construction of training, cultural and leisure centres in the communes;
- the development of continuing education in connection with study groups using the mass media (page 14);
- educational research on continuing education (for example, development of teaching methods suitable for adults) (page 9 et seq.).

The parties

The PDC advocates the energetic development of possibilities for further vocational training, recommending the establishment of regional institutions for further vocational training and retraining to be run by the social partners (Objectives, Recommendation 58). Considerable importance is attached to training for women:

> "Within the context of adult education, appropriate training programmes must be available for women who no longer have family responsibilities and wish to return to outside employment". (Programme for 1975, Recommendation 80).

With a view to enabling workers to increase their occupational proficiency, provision should be made for regular paid training leave in collective agreements or, if necessary, by law. (Recommendation 58):

> "In future, the cost of further training or retraining for workers threatened by structural or technological unemployment must be covered by unemployment insurance". (Item 81, Programme for 1975).

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1) The establishment of the Lucerne Academy in 1971 initiated systematic vocational training over several years for specialists in adult education in German-speaking Switzerland. Its main purpose is to devise courses for training teachers for adult education. A three-year period of in-service training for such specialists leads up to a canton diploma and is designed to prepare candidates for the independent planning, preparation and evaluation of different types of adult education course.
The adult education schemes of the FSEA are described in the first part of this report as examples of recurrent further training.

Adult education must be improved and developed on lines commensurate with its growing importance. It should not be merely a means of continuing vocational training but should also foster self-development. Generally speaking, responsibility for adult education should be assumed by private institutions but encouraged by the government (Recommendation 59). Establishments for training teachers for adult education should be improved and developed. Modern methods of study and teaching must be more widely adopted, especially television courses and mass-media education programmes.

The PDC calls on the Confederation to supervise both the training schemes and the management of institutions providing correspondence courses (Recommendation 60).

The PRDS, defines training as a life-process (1) in its Objectives for 1971 and calls on the Confederation to promote "all activities in the field of adult education, retraining and further vocational training".

It proposes that:

- training and further training programmes should be regulated by a diploma examination;
- appropriate courses should be organised and co-ordinated by business and industry, etc., and by the cantons, communes, universities and vocational schools;
- these courses should be given on television and diplomas should be awarded by examination (pages 30-31).

In its draft programme for a cultural and educational policy (1975), the PRDS points out that continuing and recurrent education have an effect on the organisation of basic education (page 2). Each final diploma is seen only as the end of a stage. In each training channel, provision has to be made for regular further training courses linked up with basic training. The new teaching methods, especially individualised teaching and use of the mass-media, are extremely important for this purpose.

The PRDS proposes that adults (i.e. persons who have attained their majority) should be allowed to participate in the determination of the objectives, methods and structures of advanced training. Experiments should be carried out with "on-the-job studies" to make sure that practical experience is gained (alternate periods of training and employment).

The PS (1971 Manifesto) takes the view that training is lifelong (page 17). The wage-earner must be able to adapt continually to economic development and technological progress, which therefore

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1) As a modest step towards recognition of the fact that no diploma or certificate can provide a durable or final proof of a person's knowledge and capacities, the PRDS proposes that university graduates should give up the practice of using their academic titles in everyday life.

implies entitlement to retraining and continuing education during which his material situation and that of his family should be fully guaranteed. Every employee should be able to claim paid leave for further vocational training. A special endeavour should be made to reintegrate women who have been temporarily absent from the labour force. These objectives are developed more broadly in the 1974 Recommendations on education: training leave should be granted for both the further vocational training and the general education of adults: "Each adult should be allowed a total period of two years for further training between the age of 20 and 65". (page 29)

New training opportunities must be offered (page 19), catering for the largest possible number of individuals and interests (page 27). Training must also be made available at the place of work. The PS calls for protection against any abuses by certain profit-oriented training institutions (page 28). Centres must be set up with discussion rooms, libraries, collections of slides and mass-media material, language laboratories, cinematographic archives, and access to programmed instruction units and pre-packaged courses (page 28).

Persons taking adult training courses should be fully entitled, as a matter of principle, to take part in decision-making and management (page 29).

The UDC maintains that the harmonised development of adult education is of prime importance. Adults must be free to decide whether they wish to learn or not, what they wish to learn, and how they wish to learn. In particular, the UDC puts forward the following prerequisites for the development of adult education:

Federal and canton legislation to promote adult education; sound research to determine training requirements; the training and further training of an adequate number of education advisers and course directors (full-time and part-time); support for and, where applicable, the establishment of continuing training institutions; the promotion and development of a second training channel; the protection of further-training candidates against the practices of unreliable continuing education institutions; maximum decentralisation of further training facilities to ensure equal opportunities for rural and town populations (page 23). Equal opportunities for training are likewise claimed for women (page 7). Special mass-media programmes and new educational facilities are also demanded for older persons (page 8).

According to statements by one of its secretaries,(1) the "Association Patronale" endorses the principle of well-organised modern education. It does not question the principle of lifelong

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1) Working paper No.10 and Annex: Seminar on recurrent education, Herzberg, October 1974.

individual training and recognises that such training cannot be left to chance:

> "Continuing education has become an integral part of Swiss education policy and will be the major factor in all efforts to achieve reforms."

The Secretary of the "Association Patronale" noted that the need for further training to develop occupational proficiency is in practice only found sporadically and in individual cases. He therefore rejected the idea of "training leave to be granted to everyone":

> "There can be no question of satisfying every desire for further training. However, it is quite understood that, in addition to the firm's requirements, consideration must be given to the employee's interests".

The principle of recurrent education as "alternate periods of training and employment" has been accepted. However, further vocational training, likewise in the form of recurrent education, should be both functional and pragmatic.

The statement by the Secretary of the "Union Syndicale Suisse" (USS) was in favour of recurrent education.(1) He pointed out that recurrent education would call for changes in the whole education system. As regards further vocational training and retraining, the Secretary proposed that an occupational research institute should be set up to study foreseeable developments on the labour market and to attempt to balance supply and demand in the field of training.

He emphasised that existing institutions for continuing education have limited opportunities of development and that the implementation of recurrent education schemes was likely to be delayed by lack of funds. Public institutions, or at any rate institutions supported or supervised by the government, would therefore be required. The "Union Syndicale Suisse", according to the statement by its Secretary, is in favour of legal regulations (the reform of unemployment insurance, the amendment of the Federal Vocational Training Act). As regards training leave, however, the USS considers it advisable to rely on contractual arrangements between the social partners for the time being.

Summary

The above objectives illustrate many characteristics of recurrent education as described earlier in this report (page 31).

All the parties in question directly advocated (UDC indirectly) training for all age groups. The PRDS is already using the term "recurrent education".

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1) Working Paper for the seminar on recurrent education, October 1974 (cf. note 1, page 75).

The Conférence des Directeurs de l'Instruction Publique, the FSEA and the PS explicitly recommend that continuing education should be integrated in the overall education system.

The Confederation, the FSEA and all parties are calling for a legal basis for the promotion of adult education.(1) The FSEA, PDC, PS and the trade unions demand the introduction of training leave on a legal and contractual basis. While the PDC is mainly concerned with further vocational training, the FSEA and PS want training leave to apply to general education for adults as well. The "Association Patronale" rejects the idea of general training leave for everyone.

The PRDS requests firms, institutions and authorities to ensure better co-ordination of training and further training schemes and the standardisation of admission requirements and diplomas. The FSEA criticises the difficulty of access to training (extremely difficult examinations, inflexible curricula). The possibility of obtaining certificates by combining various "credit modules" is not mentioned. However, a specific case (a course given by the FSEA) is referred to in the second part of this report.

All the above-mentioned authorities, associations and political parties are in favour of increasing the opportunities for continuing education, and a greater use of television for this purpose is one essential demand (the Confederation, FSEA, PDC, PRDS). The CDIP, FSEA, PDC, UDC and PS call for the establishment of regional training, leisure and cultural centres.

More opportunities for continuing education should be made available in isolated regions and for hitherto under-privileged sections of the population such as, in particular, women (PDC, PS, UDC) and elderly people (UDC).

The demand is not only for more continuing education but for the supervision of the education now available. Three parties demand legislation to protect candidates for further education against abuses by unreliable educational establishments providing correspondence courses.(2)

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1) In June 1974, the National Council adopted a proposal (Schmid) to promote and subsidise adult education institutions.

2) The following two motions relating to correspondence courses have been tabled in Parliament:

   - The Sauser motion (June 1970) calls for legislation to improve conditions in the interest of the public and the reliable institutions.
   - The Müller-Marzohl motion (June 1970) calls for a commission of the CDIP to be set up to verify the quality of courses and promote education by correspondence.

   The two motions have been adopted.

The FSEA, PDC and PS are pressing for new educational establishments and the training of a sufficient number of specialists (full-time and part-time) in continuing education.

The FSEA and all parties advocate a form of education geared to adult requirements. The PRDS and PS (and indirectly the UDC) recommend that participants should be entitled to collaborate in the organisation and management of adult courses.

Research tasks in the tertiary sector of education

The main guidelines based on the theoretical model of recurrent education will relate to the tertiary sector of education as a whole, so as to determine the research required in each particular area.

General research tasks

It is important that research in the tertiary sector of education should be based on a descriptive and statistical inventory of the institutions concerned. Integrated planning of education in the tertiary sector also calls for complete statistical data on the progress and success of courses including access from the secondary sector; possibility of transfers within the tertiary sector (between universities and higher vocational schools, including the second channel of training); flow of students into employment; the possibility to return to further vocational training.

Researchers will ensure that the categories used (for example, the designation of types of school) are internationally comparable, at any rate among European countries.(1) A comparative analysis at international level will make it possible to plan alternative models for a coherent tertiary sector, which is the intention of the Science Council. Particular importance will be attached to the study of innovation processes.

This work will indicate ways in which the tertiary sector must be organised so that without straying from its fundamental objective, it can adapt with maximum flexibility to social and economic changes.

Universities and "Hautes Ecoles"

In its second report on the development of Swiss universities, the Science Council takes the view that effective and co-ordinated planning is a prerequisite for such development (page 110). This planning will have to be based on regular statistical data concerning

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1) Both the OECD and UNESCO have developed international classification systems, such as the ISCED (International Standard Classification of Education) system of UNESCO (see Boillat, 1974).

the success of courses, which will have to be compiled continuously for each new intake of students.(1)

These general surveys provide the basis required for the special studies on recurrent education at the university. It would then be necessary to investigate (for example, by means of simulation models) the organisational problems encountered by a university adopting the principle of recurrent education (individual training based on "credit modules"). Consideration must also be given to problems of co-ordination with other universities. As regards the teaching aspect of university education, recurrent education necessitates the development of specific training methods for students who return to the university after several years' employment.

A major problem that must be investigated is "over-qualification". Recurrent education can relieve basic studies of the burden of providing specialised knowledge that is superfluous and rapidly obsolete. It is therefore necessary to develop criteria for deciding what qualifications are important. This choice will be determined not only by the direct requirements of the immediate vocational objectives, but also and to a much greater extent by general economic and social considerations.(2) The research should provide information on the training prerequisites for specific occupations with a view to solving the new problems that are likely to arise over the coming years.

Higher vocational schools

For a clear overall view of this sector, the existing institutions will have to be described in terms of a standard international classification. This survey alone should suffice to bring to light the initial existing factors conducive to recurrent education. It will be necessary to determine the number of students and the volume of expenditure.

It will also be necessary to indicate where the structures needed for recurrent education are jointly provided by the institutions themselves and by further vocational training schemes.

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1) Mention may here be made of the investigation into the success of courses in Switzerland. This study was carried out at the request of the "Office de la science et de la recherche", in the preparatory phase of the University of Aargau under the supervision of Heinz Ries. It was completed in December 19[illegible].

2) Professor Hochstrasser points out that a major function of education is to maintain living and working conditions that are worthy of man. In his view, the question of whether existing training possibilities are adequate is more important than any temporary over-qualification (Statement made at Olten on 29th November 1974).

Comparative analyses of the qualifications required for admission to higher vocational schools and those acquired on completion of the curricula could provide a basis for harmonizing the system and lowering admission requirements both for applicants from the secondary sector and candidates for transfer to the university.

More research work on higher vocational schools is needed in order to co-ordinate the curricula of these schools with those of the universities and facilitate permeability in the tertiary sector of education. Holders of the "maturité" certificate would then find that higher vocational studies provided a quite valid alternative to university studies.

Continuing education

The experts' report on "Educational research" (Research Report, Vol. II, p. 218), points out that:

> "Owing to greater occupational mobility, the adult education system (1) - which must be set up and developed within the context of a planned approach to continuing education - will have to meet higher demands ... In particular, it needs to be backed up by sound research to determine requirements and define its objectives, methods and institutions."(2)

Continuing education is the field of Swiss educational research which has been most neglected by both individuals and institutions.(3) The most elementary data (number of participants; volume of canton and communal grants, etc.) are unavailable.

An initial step towards remedying this situation would be to include continuing education in the statistical surveys now planned under the Federal Act on school statistics of 27th June 1973.(4)

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1) The Science Council clearly uses the concept of "adult education" rather than "continuing education" as the general concept to cover educational opportunities offered to adults.

2) The official statement published by the FSEA (in "Education permanente" 1974/2, p.56) makes three points in this connection, i.e., that the other sectors of education must also be considered in the context of a planned approach to "continuing education"; occupational mobility is not the only reason why adult education will have to meet higher demands; unfortunately, the experts' report says nothing about the fact that "continuing education" must be backed up by sound research.

3) A list of current research projects on continuing education is attached as an annex. (See also p. 96).

4) It should be noted that this Act relates to school statistics and not training statistics. In other words, only the school system is covered.

The only research requirements which can be considered here are those directly connected with the principle of recurrent education (alternate periods of education and employment) and its relevant characteristics. Researchers must approach this problem from three standpoints at the same time: the individual's learning process, the structure of further training, and the structure of employment.

The learning process: This process will first be described on the basis of the experience of participants, their expectations and their motivations. Who decides to take a course of recurrent education during his career and why? Typical careers should be studied over time with a view to examining the interaction between periods of training and periods of employment. The following question in particular should be approached in this way:

- Do concentrated periods of education ensure greater success than education while at work? Are they a greater incentive to voluntary study while at work?

Structures of continuing education: The first requisite is a survey that will show how the supply of education is distributed throughout the country, indicating the admission requirements and, where applicable, the examination requirements. This is essential to co-ordinated curriculum planning (with a view to covering the whole country with a network of facilities for continuing education) and to the standardisation of certificates.

It is sometimes objected that the recurrent system makes continuing education unduly "scholastic". This objection must be examined, and one aspect of the problem might be formulated in the following terms: How far should the "credit modules" be "broken down" and "pre-packaged", or series of courses be standardized, to ensure maximum success?(1) This question is relevant to curriculum research which, with respect to each situation, should seek the most effective compromise between the following two procedures:

1. The rationalisation and programming of studies (for example, use of audio visual methods); monitoring of results;
2. Active and creative methods which encourage the student both to act individually and share responsibility.

Structure of employment: The aim here is to identify the prerequisites for recurrent education. What are the organisational problems of a firm in which a given percentage of its personnel is regularly absent for continuing education on a full or part-time basis? The firm's management experts could subsequently develop

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1) In the recurrent education system, where responsibility is shared between teacher and trainee, the "successful study" signifies the level attained in the pursuit of jointly agreed objectives.

models for the use of slack periods in the business cycle to enable personnel to take further training courses (for example, shorter hours, compulsory holidays). It should be possible to verify by observation whether and to what extent the acquisition of a further training "credit" has an effect on the person's work, after which, procedures could be developed and tried out to facilitate the practical application and consolidation of the new knowledge acquired (for example a firm advisory service or refresher courses).

Recurrent education courses should be combined at the outset with an evaluation process based on three factors, i.e. the subjective experience of the trainee, the opinion of the educational institution, and the individual's personal situation (for example, family, occupation), these three aspects being considered as a whole.

VOCATIONAL GUIDANCE AND GRANTS

In a recurrent education system the choice of a career is not a single, irreversible act but part of a lifelong decision-making process. Recurrent education implies the possibility of seeking advice on continuing education and job prospects throughout the working life and, more particularly, after retirement. Vocational guidance and training grants are related, since it is precisely in cases where the adviser cannot provide direct information about grants, or allocate them himself, that adults hesitate to seek guidance.

Career guidance

The Confederation requires the cantons (1) to provide free and optional career guidance facilities and it allocates funds for this purpose. The Confederation can only require cantons to provide university guidance (on problems affecting students and pupils in second-cycle secondary education) if they have universities,(2) whereas such guidance would seem even more essential in the other

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1) Pursuant to the Federal Vocational Training Act of 20th September 1963 (Articles 2-5).

2) The Confederation requires cantons with universities to lay down regulations for university guidance under the Federal Act on university aid (Message of the Federal Council of 19th January 1972, p.31). For details of the present situation in connection with university guidance, see the final report of the commission set up by the Conférence Universitaire Suisse pour l'Orientation Universitaire: "L'orientation des élèves de l'enseignement secondaire et des étudiants dans le cadre des services d'orientation dans le système suisse d'enseignement de formation", Politique de la Science, Cahier supplémentaire No.5, 1974.

cantons. Since 1972, however, the Federal Council has acknowledged "that the services provided by vocational guidance are also proving to be essential in an increasing number of cases when adults change their jobs".(1) At present, advisers have neither the time nor the training that would enable them to provide adequate career guidance throughout an individual's life.

Prospects

Since 1972, the Federal Council has given priority to the development of vocational guidance, including adult guidance, and the four political parties endorse this view.

The PDC calls for educational guidance throughout university training (1971, Recommendation 56) and guidance services for schools as well as vocational and continuing education (Recommendation 61). More specifically, the PRDS argues for the development of a service providing advice and information on available training and study grants. The UDC is in favour of extending vocational guidance and educational advisory services (1971, Recommendation 150) together with occupational and career guidance for second-cycle secondary school pupils throughout their studies. The PS (Programme for 1975, p.46) would like guidance services to be organised in such a way that they can be used at any time by anyone using the education system.

Training subsidies

Within the context of training subsidies, a distinction must be made between loans (repayable) and grants (not repayable). The role of study loans granted by the cantons has diminished in recent years. The Confederation does not subsidise such loans. Similarly, the importance of the private grant-paying foundations (for example, the "Fondation Pestalozzi" or "Pro Juventute") has decreased as public expenditure for this purpose has risen. The Confederation subsidises training under the legislation on vocational training, agriculture and grants.(2) The three Acts concerned have one common feature: the Confederation will only allocate subsidies provided that the cantons - and also the communes and third parties in some circumstances - likewise make contributions. The cantons, which have sovereign powers in matters relating to education, are free to organise and calculate grants as they wish, which therefore means that grant regulations differ from one canton to the next. In some cantons the grants cover maintenance and training costs, but not in

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1) Ibid.

2) Federal Act of 19th March 1965, on subsidies for canton expenditure on study grants.

others. As regards continuing education, one factor plays a key role: in principle, the size of the grant depends on the financial means of the applicant and his parents. Furthermore, the grant scale does not usually allow for married candidates with children.(1)

Prospects

Under the proposed new articles of the Constitution which relate to education (Message of the Federal Council of 19th January 1972), the Confederation sought to harmonize the canton grant schemes more effectively and allocate training subsidies itself. It was even envisaged that the Confederation should subsidise study loans granted by the cantons (this development suffered a severe set-back when the proposed articles were rejected). The initiative now lies with the cantons. The "Conférence des Directeurs Cantonaux de l'Instruction Publique" appointed a commission - which also included representatives of the Confederation - to identify the problems and propose solutions. In its initial interim report, the commission has proposed that the Confederation and the cantons should do everything possible to even out discrepancies among canton grant schemes.

Harmonization of the canton schemes is endorsed by the PDC, PRDS, PS and, at least in spirit, by the UDC.(2) The PRDS would like consideration to be given to methods of covering maintenance and study costs.

As far as subsidies for adult training and continuing education are concerned, the PDC would like a medium-term system to be set up whereby the adult candidate would personally assume responsibility for financing his studies or further training. The PRDS endorses the idea of a Swiss loan fund that would enable a candidate to study without depending on his parents. The PS would like adult education or the second channel of training to be financed on the lines adopted in the case of initial studies. The"Fédération Suisse pour l'Education des Adultes" (FSEA) acknowledges that the adult can and must personally provide the essential part of the expenditure and time required for continuing education. However, the person who wishes to learn must be encouraged and assisted more than in the past. Institutions currently allocating grants must be developed so that they can also finance adult training courses and continuing education.

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1) There are exceptions, as in the case of retraining courses for employed persons who wish to become primary teachers.

2) "It is necessary to set up a grant scheme covering all fields of education and enabling all young people to acquire training commensurate with their abilities". (UDC Action Programme 72, Recommendation 149).

The question of training leave was dealt with in the previous chapter.

On 13th December 1973, the National Council adopted a proposal inviting the Federal Council to submit to Parliament a new text for an article of the Constitution concerning the financing of training and giving the Confederation powers to legislate in this field. On the one hand, the Confederation would subsidise canton expenditure on aid for training and further training and, on the other, would itself allocate training subsidies.(1)

Following a public referendum on 10th May 1972, the Federal Assembly adopted a motion instructing the Federal Council to take immediate action to revise the law on grants to ensure that adequate grants could be allocated in all areas and be supplemented by study loans. The Confederation should request the cantons themselves to promote equality of opportunity (for example, by means of an agreement). The Confederation should also undertake the revision of article 27(4) of the Federal Constitution (article on grants) with a view to establishing equality of opportunity and, at the same time, it should consider a scheme for reimbursable loans.

RECURRENT EDUCATION AS A SUBJECT FOR RESEARCH

The concept of recurrent education provides a general context in which consideration can be given to the reform of the education system. The co-ordinated development of education calls for comprehensive planning covering every field of education, in the light of the prevailing social and economic factors. As such planning must be based on research findings, the concept of recurrent education should be seen as the starting point for major research work.

State of research on recurrent education in Switzerland

No Swiss project has so far focused specifically on recurrent education. However, a small number of studies have dealt with continuing education and further training. Two quite important empirical studies are currently available (Vontobel, 1972 and Fischer, 1970). The report by the "Centre Suisse de Coordination pour la Recherche en matière d'Education" refers to twelve studies in this field which are either in hand or under consideration, but they actually deal with very limited issues only.(2)

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1) The Sahlfeld Motion of 11th December 1973, adopted in the form of a proposal by the National Council on 13th December.

2) The subjects of these studies are listed in the annex.

Continuing education has so far been the subject of very little research in Switzerland. As pointed out by the "Fédération Suisse pour l'Education des Adultes" (FSEA), "very little systematic research has so far been done on important aspects of adult education in our country".(1)

Prospects for the development of educational research

In its report on research (Vol.I, p.44), the Science Council gives educational research top priority and plans to afford it special support. It has recommended that the Confederation authorities, the cantons with universities and the Fonds National Suisse pour l'Encouragement de la Recherche Scientifique should allocate special funds to set up or develop research institutions in this field. In the medium term, the financial resources and personnel allocated to this research should be increased tenfold, i.e. it should account for 1.5 to 2 per cent of total expenditure on education. The Federal Council issued a Message relating to a draft Federal Order concerning the promotion of scientific research from 1975 to 1979 (11th March 1974), which takes account of a petition from the "Fonds National" a[illegible]he recommendations of the Science Council. In 1974 the Feder[illegible]bers accordingly voted an overall appropriation of Sw.Frs.660 [illegible]ons for those four years and authorised the Federal Council to us[illegible]2 per cent of this amount for national research programmes (in fields to be selected by itself for special incentive measures).(2)

In educational planning and research, as in the case of school statistics, the twenty cantons participating in the inter-canton agreement on educational co-ordination collaborate with each other and with the Confederation. They promote and support the institutions required for this purpose (Article 4 of the Agreement).

The Confederation and the Conférence des Directeurs de l'Instruction Publique jointly sponsor the above-mentioned Centre de Coordination pour la Recherche en matière d'Education which encourages exchanges of information and collaboration between researchers, practising teachers and educational administrators and promotes research policy. It records research projects, establishes inter-canton and international liaison and maintains an index of major research subjects.(3)

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1) FSEA: "Bildungsreform ja - aber auch für Erwachsene" ("Yes to educational reform - including adult education"). Zurich, 1970.

2) The Federal Council has reserved the right to review the measures proposed by the Science Council to ensure that they are practicable and respond to current needs (Message of 11th March 1974, FF 1974, No.15, p. 1127).

3) Statutes of the Centre (1974).

The four above-mentioned political parties are in favour of a comprehensive educational research programme. The PDC calls for careful planning, underpinned by the results of broadly-based educational research (1971 Recommendation 62). The PRDS (1971, p.27) urges the Federal Council to promote this research intensively, since it is assuming increasing importance. The UDC "is in favour of comprehensive educational research which will enable each sector of education to adapt to new requirements as they arise" (1971, 157). The PS considers that it is the Confederation's duty to promote the educational sciences as prerequisites for concerted educational reforms consistent with the responsibilities involved (1971, p.24). The FSEA invites the Science Council and the University Conference to decide where and how problems relating to the theory of adult education (1) should be studied and discussed. It expresses the hope that problems of adult education will be studied just as assiduously in the planned research centre (2) as problems relating to the education of the young.

Urgent requirements in connection with research on recurrent education

On the basis of the experts' report, the Science Council has identified six aspects of educational research which call for urgent attention. As regards several of these aspects, it has indicated the research requirements which more specifically concern the problem of recurrent education.

In the chapter on "Educational Planning", it draws attention to two essential studies.

1. "The actual facts of education and ideas as to the objectives of an educational policy should be seen in the context of development trends in the economic and political sphere" (Vol.I, p. 110).

This problem may be set out in the following terms: To what extent are the actual facts of education consistent with the models devised for recurrent education? What social, economic and political factors influence the opportunities and need to promote recurrent education? If Swiss industrial production were to be restructured, for example, how could retraining problems be solved by recurrent further training?

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1) The term "Andragogik" is used in the German text.

2) This is no doubt a reference to the recommendation of the Science Council which advocates the establishment of two or three research and training centres in this field (Research Report, Vol.I, p.111, paragraph 2.2).

2. "The processes of reform and the trends in the relevant costs must be analysed" (Vol.I, p.110).

It would be necessary to determine how the total cost would be affected by reducing the basic training in various fields (for example, vocational training, university education) and by using recurrent training to provide specialised knowledge.

This analysis would have to take account of the economic pros and cons of the recurrent education system, as was done by Schuller in 1975, for example:(1)

1. Against: The new system will cost more, because the later the training occurs in an individual's career, the higher is the loss of earnings.
   For: In the recurrent education system, training expenditure is incurred at a later stage, after a period of occupational activity during which time the money earned can be invested elsewhere. No loss of earnings is involved for unemployed persons.
2. Against: The new system will cost more because the later the training occurs, the less time remains to amortize it during subsequent employment.
   For: The value of the training is not measured by differences in earnings. Workers are not paid according to their training but on the basis of their contribution to the firm's production.

In the chapter on "Vocational training", the Science Council notes that:

> "the new demands on education (flexibility, mobility, continuing training) raise the question of the relations between the practical and the theoretical approach to specialised training and general education".

To deal with this issue in the context of the present report would call for research in anthropology and the philosophy of education with reference to the objectives and values of the concept of recurrent education. The interrelations between general and specialised training must also be examined from the standpoints of "flexibility" (ability to adapt to new functions and activities in the same occupation) and occupational "mobility" (ability to change occupations). This subject of research goes beyond the scope of vocational training. It is important for education as a whole.

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1) Schuller, Tom (CERI/OECD): "Recurrent education: economic issues". Seminar on "Recurrent education" held by the "Centre Suisse de Coordination pour la Recherche en matière d'Education, 21st-23rd November 1974, Herzberg s/Aarau (Working Paper 4).

The Science Council likewise considers it necessary to undertake: "... the scientific analysis of requirements in terms of manpower and qualifications and of the current changes in economic and occupational structures".

Educational planning based on the central idea of recurrent education calls for the analysis of future requirements, as educational facilities must always keep one step ahead of changes in society and the world of employment in order to prepare trainees for new developments. In any event, the analysis of an occupation should never be limited solely to job functions but be based on the interrelationships between all spheres of life. In analysing educational requirements, such factors as family, occupation, social and cultural life and civic functions must be given equal weight. In conformity with the tradition that has made Switzerland a direct democracy, planning must give appropriate consideration to the training needs expressed by those seeking instruction. All the same, one of the principal advantages of recurrent education is that its only long-term objective is to fix basic qualifications. With respect to specialisation, it adopts the flexible principle of "credit modules" which facilitate rapid adaptation to changes on the labour market. Planning can consequently be done on a short-term and therefore comparatively reliable basis.

This brings us to another subject of research which the Science Council considers to be urgent, namely curriculum research (Vol. I, p.109):

> "Curriculum research is designed to ascertain exactly which curricula are at present compulsory and to work out future curricula. It will be achieved by systematically including - to a much greater extent than has so far been the case - all sectors, individuals and authorities involved in education".

The specific problem of recurrent education is to harmonise curriculum content at different levels of education. Harmonisation is particularly essential if the continuing education system is to lighten the basic training programme by taking over the specialised subject matter. However, there would be no question of purely and simply reproducing this subject matter. It would have to be reshaped in order to be incorporated into educational schemes suitable for adults. New problems will arise in connection with the development of combinable " redits", since the credits must have an intrinsic value and be components of a series at the same time. The planning of curricula for universities and continuing education calls for the development of new methods which provide for effective co-operation between teachers and trainees.

In this connection, mention should be made of a general task which concerns educational planners at all stages: how are the curricula at all levels to be made to reflect the ultimate objective which is to induce the student gradually to make his own decisions, assume responsibility for his career and acquire the ability, on reaching adulthood, to participate actively in his own further vocational training?

Recurrent education is a model for the future. Accordingly, research on this subject must be based in particular on the concepts that the Science Council wishes to see applied to educational research in general:

> "While based strictly on empirical facts, it [the research] must be forward-looking. For example, if education continued to develop for a fairly long period according to the principles accepted at present (i.e. the prolongation and differentiation of education in the first stage of life) more than half the population would eventually be involved in education as students, teachers or administrators. Educational researchers will therefore have to devise new forms in good time (i.e. in the near future) which make it possible to meet the growing educational requirements without detriment to other essential spheres of life".

It is the claim of recurrent education that it represents one of these conceivable "new forms", capable of improving education and making practical life more productive without any notable increase in the cost of education as a proportion of the country's general expenditure. This claim has to be verified on the basis of empirical research. In particular, the following assumptions will have to be scrutinised:

- Recurrent education serves to combat educational discrimination against economically disadvantaged social groups by using the credit module system to reduce the "investment risk";
- Recurrent education reduces the percentage of drop-outs in higher education, second-cycle secondary education and vocational training by awarding students an intermediate diploma of practical utility instead of leaving them "in the lurch";
- Recurrent education reduces wastage of ability insofar as it holds the door open for workers who are capable of continuing their studies, even if they were unable to do so in their youth;
- Recurrent education makes it possible to use the infrastructure more rationally (for example, school premises);
- Recurrent education is a flexible system in close touch with occupational and social developments. It can be adapted more rapidly to new trends and new practical

requirements and give those who are training the time to adjust to those new demands.

EDUCATION FOR THE FUTURE: A SURVEY

The aim of Switzerland's education policy is to enable each person to obtain the training required in order to shape his individual future and the future of the country. As the present report seeks to demonstrate, the concept of recurrent education is a potential guide to the achievement of this objective. Switzerland is seeking to secure the advantages of this new system through the organic and co-ordinated development of its existing educational institutions without sacrificing its characteristic cultural diversity.

As indicated in the third part of this report, the principles of recurrent education are already to be found here and there in the views expressed by the authorities and by politicians of various persuasions with regard to future developments. Furthermore, the three examples given in the second part of this report show that some of these principles are already being implemented in several places, if only in a few firms and organisations. Accordingly, one question must be asked: how can these initiatives - which already exist in various fields of training and continuing education - be combined into a comprehensive and coherent system which would cover not only all the cantons and regions but also every type and field of training?

This task is so demanding that it can only be accomplished through close collaboration between the authorities, the politicians and the educational planners and researchers and with the co-operation of teachers and trainees. Planning in a federal democracy cannot be the work of a few specialists deliberating behind closed doors. A broad cross-section of the population must participate. Educational policy objectives must consequently be set out clearly and the needs of the public must be taken into consideration.

In order to establish a theory of education geared to future requirements, it is necessary to shape public opinion over a long period, and this implies an effort on the part of all concerned to acquire the background knowledge. A broad open-ended discussion on the purpose and the future of Swiss education could approach the subject from the following three standpoints (already mentioned in the first part of this report):

a) Education and employment;
b) Education and society;
c) Education and personality.

The first approach concerns the relations between education and employment. In recent years, or even recent months, it has become increasingly evident that limits to economic growth also imply limits to the expansion of the education system. It is precisely such economic considerations that lead to a conclusion which is at first sight paradoxical, i.e., that continuing education must be developed in order to curb the continual rise in expenditure on education. As stated in 1973 by Federal Councillor H.P. Tschudi:(1)

> "Many educational policy-makers have put forward excellent arguments for broadening the tasks of continuing education with a view to shifting some of the weight from vocational and university training programmes. They take the view that the initial period of continuous schooling in an individual's life should primarily be designed to give him the general groundwork that will enable him to get a job and subsequently continue his training. Specialised training in the occupation should be closely associated with practical work and reserved for continuing education, irrespective of whether a first, second or third specialisation is involved. It should accordingly be possible to avoid any prolongation of the first period of training which is undesirable owing to the psychological and sociological effects on young people. (...) A long stay in the school atmosphere - inevitably artificial in some respects - can make it considerably harder for an individual to settle down to working life. A change of this kind calls for the substantial development of continuing education and its integration with public education."

A threefold effect can be expected if the process of occupational specialisation is transferred to recurrent further training: the training is more up-to-date and practical; opportunities for promotion and the performance of new tasks in the same sector are increased; and transfer to other occupational sectors is facilitated.

Employment, further vocational training and general adult education all interact. Further general education can serve as an incentive to the independent and creative organisation of leisure time. Moreover, the judicious use of leisure time influences an individual's attitude to his work, so it is in the interest of both employer and employee that general education should likewise be stressed in vocational and further training.

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1) Federal Councillor H.P. Tschudi: "Weiterbildung und Erwachsenenbildung" (Continuing education and adult education). Address at the 50th Anniversary of the "Centre d'Education des Sociétés COCP" in 1973. (Mr. Tschudi was Federal Councillor and Head of the Department of the Interior up to the end of 1973).

In line with Switzerland's liberal tradition, it is generally considered that the organisational and material problems involved in alternating periods of employment and training (for example, training leave and pay) can only be resolved by agreement between employers and employees. At the same time, however, it is considered that the financial burden of setting up an effective continuing education system would be too heavy if it were not partly borne by the public authorities.

The second matter for discussion is the relationship between education and society. In our dynamically evolving society, education is assuming increasing importance. In the past the education system merely had to impart knowledge which was essentially traditional, but now it must enable students to participate responsibly in the organisation of future society, not only in the world of employment and business but also in the cultural, municipal, social, civic and political spheres.

Recurrent education can contribute to the development of the cultural values and special characteristics of each canton, region and the emergence of new values. It can strengthen the individual's sense of responsibility towards others and develop good neighbourliness without which our welfare society cannot function.

Recurrent education should also develop and sustain the sense of communal responsibility. The autonomy of the communes (precisely in school and educational matters), which is characteristic of the Swiss Confederation, now entails a growing volume of new and increasingly demanding tasks for the public officials of the communes (sometimes in addition to their normal work). Only a nation-wide recurrent education system also including the isolated regions can enable them to discharge their functions adequately. From a more general standpoint, and in a democracy such as ours, which makes systematic use of the referendum, it is also a task of basic and continuing education to prepare citizens to exercise their right to vote in a responsible and competent manner:

> "The functioning of our democratic system", claims Federal Councillor Tschudi, "will be under increasing pressure from the growth of technology in our daily lives if the layman cannot understand the basic aspects of the problems that arise and if he is unable to have his say in the decision-making process".(1)

However, the development of the personality remains the point of departure and the objective of any plan or political action in the field of education, and it is with this concept that we shall conclude this report. Although the political parties unanimously call

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1) Federal Councillor H.P. Tschudi, ibid.

for equality of opportunity in education it must be borne in mind that this does not mean that the task of training should be uniform but that continuing training and education schemes should be provided to enable adults, like young people, to make the most of their individual potentialities. The concept of lifelong education stems from the findings of a study which shows that the human being is capable of learning and developing his personality throughout his life.

The considerations set out in this report lead to one inevitable conclusion, namely that the Swiss education system can only be adapted to the heavy and diverse demands of the modern world by the systematic and carefully planned development of recurrent education.

If this exacting task, essential for our people's future, is to be accomplished successfully, close co-operation is required between the public authorities and private initiative. From the range of institutions already existing in this field, an attempt must be made to set up a system of recurrent education which should be linked up comprehensively and effectively with the other sectors of education.

Annex

CURRENT RESEARCH PROJECTS ON CONTINUING EDUCATION (SWITZERLAND)

a) French-speaking Switzerland (1)

Furter, P., EPSE, Geneva: "Instruction et éducation de l'homme inachevé". (Training and education for the incomplete man).
(Formulation of a theory on continuing education)
Began: October 1972; completed: November 1973.

Furter, P., Chair of Pedagogical Studies, University of Neuchâtel: "Bibliographie critique et comparée de l'éducation permanente" (Critical comparative bibliography of continuing education)
(Contribution to a Brazilian collective publication)
Began: October 1972: completed: 1973.

Girod, R., Department of Sociology, University of Geneva: "Quelques effets à long terme de l'éducation et de l'instruction" (Some long-term effects of education and training)
(An evaluation of the importance of education and training on the basis of the behaviour of adults and their status in the community. Deals primarily with the "under-educated").

Hexel, D., Chédanne, R.G., Psychopedagogical Research Centre, Geneva: "Structures scolaires et éducation permanente"
(Educational structures and continuing education)
(Study of factors that schools should integrate into their methods, curricula and approach in order to prepare their pupils for continuing education).
Began: February 1972.

Huberman, M., EPSE, Geneva:
"Effets de l'éducation des adultes" (Effects of adult education)
(- Study on the cognitive, emotional and psychomotor effects of three different adult education courses;
- Development of the tools required for evaluation;
- Development of tools for systematic evaluation in continuing education institutions).
Began: 1972.

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1) Continuous survey of pedagogical research, I.R.D.P., Documentation Service, Neuchâtel, 1973.

b) German-speaking Switzerland (1)

Dellsberger, P.; Horber, B. (Director: Kneschaurek, F.), St. Gallen: (Centre de Recherches Prospectives): "La formation professionnelle".

(Analysis of vocational training in terms of future requirements).

Began: Autumn 1972; completed: 1973.

FSEA: Working Group, Zurich:
"Ausbildungskonzepte in der Erwachsenenbildung" ("Conceptions of training in adult education")

(Educational planning in nine fields of adult education. Development of educational objectives and curricula, with proposed structures).

Began: December 1971; completed: ?

FSEA: Working Group, Zurich:
Ausarbeitung eines Bildungskonzeptes für die Ausbildung zum haupt- oder teilberuflichen Mitarbeiter in neun verschiedenen Tätigkeitsfeldern der Erwachsenenbildung.

(Formulation of a plan for the training of full or part-time assistants in nine fields of adult education)

Füglister, P. (Under the supervision of Lustenberger, W.) Institut Suisse de Pédagogie Professionnelle:
"Training requirements of vocational training teachers"
("Bildungsbedürfnisse der Gewerbelehrer")

(Practising vocational training teachers describe:
- critical situations from an educational standpoint;
- measures adopted;
- effect of the measures;
- probable origins of the critical situations.

The evaluation makes it possible to:
- establish basic subject matter for curricula to be used in courses for vocational training teachers in pedagogics, psychology, didactics, etc.;
- use this subject matter for initial courses in good teaching practice and also for further training courses).

Began: January 1972; completed: December 1975.

Gehrig, H.: Teacher Training Institute, University of Zurich:
"Bildungsbedürfnisse der Volksschullehrer" (Bivo-Projekt) /"Training requirements for teachers at the compulsory education level (Bivo Project)"7

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1) "Centre Suisse de Coordination pour la Recherche en matière d'Education": "Projets de recherche en matière d'éducation en Suisse alémanique, 1973". ("Educational Research Projects in German-speaking Switzerland, 1973").

(Basic research on curriculum revision. Requirements and innovations. Analysis and medium-term forecast of current training requirements as expressed by the teachers concerned; analysis of requirements from the standpoint of a "comprehensive scheme" for training teachers).

Began: 1969; completed: 1973.

Hedinger, U.: Preparatory Phase of the University of Aargau: "Veränderungen erziehungsrelevanter Einstellungen bei Lehrern durch die Teilnahme an einem erziehungswissenschaftlichen Fernkurs im Medienverbund (Begleituntersuchung zum Funkkolleg Erziehungswissenschaft in der Schweiz)" (Changes in teachers' attitudes to the training of children through participation in broadcast courses on the educational sciences).

(To what extent a teacher's attitude to the training of children changed as a result of his participation in a broadcast course on the educational sciences.)

Began: May 1972; completed: May 1973.

Hedinger, U.: Begleitstudie Funkkolleg "Sozialer Wandel",
König, J.; Egger, J.: Preparatory Phase of the University of Aargau: "Entwicklungstendenzen der Bildung Erwachsener in der Schweiz" ("Trends in adult education in Switzerland")

(Based on case studies of organisations specialising in adult education in Switzerland)

Began: 1973; completed: 1975.

Oggenfuss, F.: "Ausbildung für Ausbildner",
Portmann, S. (under the supervision of Bangerter, A.), Solothurn Training College: "Einsatz der Unterrichtstechnologie für die Lehrerweiterbildung" ("The use of educational technology for the further training of teachers")

(In summer 1973, 1,500 teachers in eight different areas were to be given instruction on the same subjects at the same time. All subject matter was prepackaged by the audio-visual methods centre; the courses were programmed: production method, presentation method, processing method, efficiency).

Began: May 1972; completed: August 1973.

Rauh, C.; König, J.; Zbinden, W.
"Zusammenarbeit Schule-Familie" ("School-family collaboration")

(Action-research project at the interface between further teaching training and information for parents)

Began: 1974, completed: 1976.

Tuggener, H.; Meile, B.; Oggenfuss, H., Pestalozzianum, Zurich: "Bedürfnisanalyse der Lehrerfortbildung" ("Analysis of requirements concerning further training for teachers")

(Study of the training requirements and interests of the teaching body at compulsory education level in the canton of Zurich)

Began: autumn 1971; completed: early 1973.

Vontobel, J. (under the supervision of Biäsch, H.), Institut de Psychologie du Travail, EPF Zurich:
"Erfolgskontrolle in der Erwachsenenbildung" (Monitoring results in continuing education)

(A selection from the following limited surveys on specific subjects of research, types of course and continuing education institutions:

- appraisal of available courses by actual and potential participants;
- appraisal of training by participants;
- general analysis of continuing education requirements;
- appraisal of curriculum and teaching by teachers in continuing education;
- experimental monitoring of the results of training, tests)

First phase completed; second phase in hand.

Weinrebe, H.; Brügelmann, H. (under the supervision of Hengartner, E.), Teacher training department of the canton of St.Gallen:
"Lehrerfortbildungsprojekt Mathematik" ("Project on the further training of mathematics teachers")

(The further training of teachers studied as the development of an action-oriented curriculum)

Began: October 1971; completed: 1976.

Additional bibliography

This list is limited to studies which are not mentioned in footnotes with all bibliographical details.

Amberg, H.-U.

- "Education permanente - Leitidee für die Lösung von Bildungsfragen"

("Key concept for the solution of problems in education") in: "Education Permanente", Journal of the FSEA, 1973-74.

- "Education permanente - Aspekte ihrer Verwirklichung"

("Continuing education - Aspects of its implementation") in: "Education Permanente", 1974/1.

Boillat, J.-M.:
"Pour une approche du secteur post-secondaire de la formation en Suisse (secteur tertiaire)" (1974) (Approach to the post-secondary sector of training in Switzerland (tertiary sector))
(Unpublished study by the "Centre Suisse de documentation en matière d'Enseignement et d'Education", Geneva. Quoted with the author's permission).

Cavadini, J.; Combes, J.:
"Enquête relative au perfectionnement professionnel des enseignants de la Suisse romande et du Tessin (1974)" (Investigation into the training of teachers in French-speaking Switzerland and the Ticino region)
(Unpublished study by the "Institut Romand de Recherches et de Documentation Pédagogiques (IRDP)" ("French-speaking Institute of Pedagogical Research and Documentation"), Neuchâtel, November 1974. Quoted with the author's permission.

Egger, E.; Blanc, E.:
"L'enseignement en Suisse". "Centre Suisse de Documentation en matière d'Enseignement et d'Education", Geneva, July 1974.

GRETI ("Groupe Romand d'Etude des Techniques d'Instruction" - "French-speaking study group on teaching methods"):
Gretler, A.; Haag, D.; Halter, E.; Kramer, R.; Munari, S.; Stoll, F.:
"Die Schweiz auf dem Weg zur Education permanente" ("Switzerland on the road to continuing education")
(Preface by Federal Councillor H.P. Tschudi). Zurich/Aargau, Benziger/Sauerländer, 1972) (published by GRETI)

Luescher, K.; Ritter, V.; Gross, P.
"Vorschulbildung - Vorschulpolitik" ("Pre-school education - pre-school education policy") Zurich/Aargau, Benziger/ Sauerländer, 1972.
(Contribution to the documentation and debate on the current situation in German-speaking Switzerland).

Rauh, C.:
"Der Lehrer und die Laufbahnwahl seiner Schüler. Vorschläge zur Reform der Lehrerbildung" ("The teacher and his pupils' career choice. Proposals for a reform of teacher training"). Aargau, 1974.
(Reports on work done at the University of Aargau, preparatory Phase, vol. 3).

ABBREVIATIONS (CANTONS)

AG	Aargau
AI	Appenzell Rh. Int.
AR	Appenzell Rh. Ext.
BE	Bern
BL	Basle-District
BS	Basle-Town
FR	Fribourg
GE	Geneva
GL	Glarus
GR	Graubunden (Grisons)
LU	Lucerne
NE	Neuchâtel
NW	Nidwalden
OW	Obwalden
SG	St. Gallen
SH	Schaffhausen
SO	Solothurn
SZ	Schwyz
TG	Thurgau
TI	Ticino
UR	Uri
VD	Vaud
VS	Valais
ZG	Zug
ZH	Zurich

ABBREVIATIONS (ORGANISATIONS)

ASE:	Association Suisse des Enseignants (Swiss Teachers' Association)
ASEC:	Association Suisse pour l'Enseignement par Correspondance (Swiss Association for Education by Correspondence Courses)
CASE:	Conférence des Associations Suisses d'Enseignants (Conference of Swiss Teachers' Associations)
CDIP:	Conférence des Directeurs Cantonaux de l'Instruction Publique (Conference of Canton Directors of Public Education)
CERI:	OECD Centre for Educational Research and Innovation
CCREDE:	Communauté Romande pour l'Economie d'Entreprise (Swiss-speaking Association for Business Economics)
EPSE:	Ecole de Psychologie et des Sciences de l'Education, University of Geneva (School of Psychology and Educational Sciences)
ETS:	Ecole technique supérieure (higher technical school)
FOBB:	Fédération Suisse des Ouvriers sur Bois et du Bâtiment (Swiss Federation of Workers in the Woodworking and Building Trades) New name: Syndicat du Bois et du Bâtiment (Woodworkers' and Building Workers' Union)
FPSP:	Fédération Suisse du Personnel des Services Publics (Swiss Federation of Public Service Workers)
FSEA:	Fédération Suisse pour l'Education des Adultes (Swiss Federation for Adult Education)
FSEP:	Fédération suisse des Ecoles Privées (Swiss Federation of Private Schools)
OECD:	Organisation for Economic Co-operation and Development
OFIAMT:	Office Fédéral de l'Industrie, des Arts et Métiers et du Travail (Federal Office of Industry, Crafts, Trades and Labour)
PDC:	Parti Démocrate-Chrétien Suisse (Swiss Christian Democrat Party)
PRDS:	Parti Radical-Démocratique Suisse (Swiss Radical-Democrat Party)

PS: Parti Socialiste Suisse (Swiss Socialist Party)

PTT: Postes, Téléphones et Télégraphes (Post Office)

UDC: Union Démocratique du Centre (Democratic Union of Centre Parties)

UNESCO: United Nations Educational, Scientific and Cultural Organisation

USEC: Union Suisse des Ecoles par Correspondance (Swiss Union of Correspondence Course Schools)

USS: Union Syndicale Suisse (Swiss Trade Unions Association)

OTHER ABBREVIATIONS

CF: Conseil Fédéral - Federal Council

CITE: Classification Internationale Type de l'Education (International Standard Classification of Education)

ORM: Ordonnance sur la Reconnaissance de Certificats de Maturité - Ordinance on the recognition of second-cycle secondary-school "Maturité" certificates

FF: Feuille Fédérale - Official Gazette

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